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ABSTRACT

Agricultural production in 1982 increased in all countries compared with 1981, except in Poland and the German Democratic Republic. The grain harvest was a record, just below 106 million tons; oilseed, tobacco, and sugar beet crops were higher; but potato production fell. Meat production dropped approximately 3 percent, the second annual decline in a row. Restrictions on overall consumption, investment, and imports continued as the region adjusted to reduced credit availability and balance-of-payments problems. The value of U.S. agricultural exports to the region fell more than 50 percent to \$877 million, the lowest since 1973. A smaller decline is forecast for 1983.

Keywords: Eastern Europe, Poland, Yugoslavia, crops, livestock, agricultural policy, trade, credit.

FOREWORD

This report highlights the major agricultural developments in 1982 and assesses the outlook for 1983. Agricultural trade decisions both in 1982 and in 1983 have been influenced more by the individual countries' external financial conditions than by domestic production.

The level of consumption deteriorated, particularly in Poland. A special feature in this report describes the principal developments concerning Polish agriculture in the aftermath of martial law. The Yugoslav economy is also experiencing severe economic problems. Another special feature highlights Yugoslav and Western efforts to bring about recovery.

Thomas A. Vankai, section leader for Eastern Europe, directed and coordinated preparation of this report. Sections were written by Nancy Cochrane, Edward Cook, Robert Cummings, and Thomas A. Vankai. Karen Campbell assisted in the compilation of statistical data. Patricia Reed and Pauline McHeard prepared the manuscript for publication. Information submitted by the U.S. agricultural counselors and attaches in Belgrade, Berlin, Bucharest, Vienna, and Warsaw is acknowledged with appreciation.

Statistical data in this report are taken from the yearbooks of the respective countries and from the yearbooks of the Council for Mutual Economic Assistance. Other sources are noted as appropriate. Data on Albania are so scarce that Albania is not covered here.

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We welcome any comments, suggestions, or questions concerning either this report or the current agricultural situation in Eastern Europe. Responses should be directed to the East Europe-USSR Branch, International Economics Division, Economic Research Service, USDA, Room 314, 500 12th Street, SW, Washington, D.C. 20250. Our telephone number is (202) 447-8380.

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TERMS AND MEASURES

Terms

Agricultural land—Arable land (cultivated land, gardens, and orchards), meadows, and pastures.

Agricultural trade—Trade in food, fiber, and feed, and raw materials used to produce food.

Council for Mutual Economic Assistance (CEMA): Bulgaria, Cuba, Czechoslovakia, the German Democratic Republic (GDR), Hungary, Mongolia, Poland, Romania, USSR, and Vietnam.

Eastern Europe: Northern countries—Czechoslovakia, the GDR, and Poland. Southern countries—Bulgaria, Hungary, Romania, and Yugoslavia.

Transshipments: U.S. exports destined for Eastern Europe and unloaded in Canada or Western Europe, but reported by the U.S. Bureau of the Census as exports to the port of entry.

Measures

Metric units are used throughout:

One metric ton = 2,204.6 pounds

One kilogram = 2.2046 pounds

One hectare = 2.471 acres

Cattle hides: one piece = 22 kilograms

Milk: one liter = 1.031 kilograms

EASTERN EUROPE

REVIEW OF AGRICULTURE IN 1982 and OUTLOOK FOR 1983

SUMMARY

Agriculture performed relatively well in Eastern Europe last year, generally outpacing overall economic growth. Only the German Democratic Republic (GDR) and Poland failed to report higher agricultural output than in 1981. Nevertheless, the regionwide increase in gross agricultural production was small. The grain harvest was a record, but livestock inventories and production declined, reflecting a general policy in Eastern Europe to reduce dependence on imported grain.

Major macroeconomic adjustments continued in 1982. The region reduced consumption, investments, and imports and expanded exports to adjust to reduced hard-currency availability and severe balance-of-payments problems. Austerity will continue in 1983, with 1982's improved crop production partially substituting for imports of livestock feed. Per capita consumption of food, especially meat, should not increase this year.

For the first time in almost a decade, Eastern Europe nearly balanced its foreign trade last year. Total trade declined sharply, with the decline in imports exceeding that of exports. More significantly, each country except Yugoslavia reported a trade surplus on its convertible currency account. The region's agricultural trade deficit continued to drop last year. The agricultural trade deficit of Poland, the region's largest food importer, dropped by almost 40 percent.

The net hard currency debt of Eastern Europe declined to approximately \$75 billion at the end of 1982, down from \$81 billion a year earlier, although the region continued to experience major problems in meeting debt-repayment obligations. Poland was forced to reschedule its commercial debt once again, and Romania secured rescheduling agreements for its commercial and government-guaranteed debt.

U.S. agricultural exports to Eastern Europe, including transshipments, were valued at \$877 million in 1982, less than half of 1981 and the lowest since 1973. The United States exported 3.5 million tons of grain (91 percent corn) to the region, down from 7.2 million in 1981. Exports of soybean cake and meal fell almost 60 percent to 524,000 tons, while soybean exports rose slightly to 546,000 tons. U.S. agricultural imports from Eastern Europe fell for the fifth straight year in 1982, to \$228 million, 18 percent below 1981.

The region's reduced agricultural imports aggravated already tight retail food supplies. Meat, sugar, and vegetable oil were in shortest supply throughout the region and, in Poland and Romania, were obtainable only with ration coupons. Yugoslavia resorted to the rationing of vegetable oil and coffee early this year. Significant increases in retail food prices in all countries late in 1981 and early 1982 proved insufficient to bring supply and demand into balance.

Increasing food self-sufficiency remained the main goal of agricultural policy. Officials stressed improved efficiency, a more realistic alignment of retail and producer prices with production costs, and improved farm profitability to raise output. Private agricultural producers benefited from the self-sufficiency policy, as officials

sought improvements in local food supplies without extensive investment in the state sector. In Poland, the Government pledged to preserve the present agricultural system of predominantly private producers.

Total grain production in 1982 is estimated at 105.7 million tons, up 11 million from 1981. Good yields for both fall and spring sown crops were responsible for the record outturn, as the area sown to grain was less than 1 percent higher than in 1981. Grain imports were approximately 9 million tons last year and were lower for the second year in a row.

Much-increased soybean production compensated for lower sunflowerseed and rapeseed output, resulting in a good 1982 oilseed outturn of approximately 4 million tons. Better soybean yields accounted for all of the increase, as the total oilseed area declined slightly. The worsening financial situation of the region caused a 20-percent drop in imports of oilseed meal, and oilmeal consumption dropped 14 percent.

Sugar beet production was about 49 million tons, slightly higher than in 1981. The production of refined sugar, at 5.2 million tons, was up 2 percent from 1981. Potato production fell 18 percent to 53 million tons. Summer drought led to sharp declines in potato output in Poland and the GDR. Potatoes are an important livestock feed in these two countries, and feed supplies there, particularly in Poland, have suffered this year. Tobacco production rose from 350,000 tons in 1981 to about 385,000 in 1982, mainly because of improved yields in Bulgaria, Romania, and Yugoslavia.

Livestock production last year was more firmly tied to domestic feed availability than in previous years. As such, domestic price policies favored cattle and sheep at the expense of hogs and poultry. Cattle and hog numbers were down 1 and 3 percent, respectively, and only Hungary reported an increase in hog numbers. Meat production fell for the second year in a row, declining 3 percent. Higher beef output only partially offset a sharp drop in poultry and pork production, leaving meat supplies lower than in 1981. In Poland, dressed poultry production decreased almost 60 percent because feed shortages forced the closure of the majority of state-owned broiler factories. Milk and egg production in the region each decreased 2 percent. Despite declining production, Eastern Europe continued to remain a net exporter of live animals, meat, and meat products. Exports of meat and meat products have exceeded 1 million tons annually since 1979.

Crops are the priority sector in agriculture in 1983. However, any substantial expansion in domestic feed is unlikely, as only small increases in agricultural investment and input use are expected. Early prospects for crop production are generally favorable. Winter grain area in all countries increased slightly or remained at last year's level, except in Poland. The 1982/83 winter was mild, and spring sowing of grain is planned at about last year's level. Total oilseed production is expected to show little, if any, increase in 1983. Despite the excellent 1982 grain harvest, little expansion in livestock pro-

duction is forecast for this year. The improved grain supplies will partially substitute for feed imports, leaving livestock growth still restricted by an inadequate feed base.

Grain imports should fall to approximately 8.5 million tons, the third consecutive annual decline. Soybean meal imports should be slightly below 1982's depressed level, while soybean imports could be somewhat higher this year. Total U.S. agricultural exports to the region for fiscal 1983 are estimated at \$816 million, 16 percent

below fiscal 1982 exports. Declines are forecast for grains, while some increases in exports of soybeans, vegetable oil, and cotton are expected, because Yugoslavia and Hungary have received Commodity Credit Corporation (CCC) credit guarantees totaling \$277 million to import these, among other, commodities. Poland and Romania, traditionally our largest East European markets, are currently not being considered for CCC credit guarantees.

Summary of descriptive data, Eastern Europe, 1981

Country	Land			Socialized agricultural land ¹	Population, mid- year	Labor force ²		GNP ²	
	Total	Agricul- tural	Arable			Total	Agricul- tural ³	Total	Per capita
	1000 hectares			Percent		Millions		\$ Billion	Dollars
Bulgaria	11,091	6,179	4,161	99	8.9	4.72	1.15	34.0	3,820
Czechoslovakia	12,789	6,843	5,171	95	15.3	7.35	⁴ 1.08	137.2	8,970
GDR	10,833	6,264	5,015	94	16.7	⁴ 9.01	⁴ 0.85	162.9	9,750
Hungary	9,303	6,601	5,317	94	10.7	5.23	⁴ 1.01	63.7	5,950
Poland	31,268	18,910	14,858	32	35.9	19.65	5.92	178.0	4,960
Romania	23,750	14,948	10,509	91	22.4	12.15	4.20	94.7	4,230
Yugoslavia	25,580	14,281	7,864	31	22.5	9.21	2.40	51.8	2,300
Total	124,614	74,026	52,895	—	132.4	67.32	17.83	722.3	5,455

¹In terms of ownership. ²Handbook of Economic Statistics, 1982, Central Intelligence Agency. GNP figures are in 1981 dollars. ³Includes self-employed farmers. ⁴1980 data.

GENERAL ECONOMIC SITUATION

Eastern Europe experienced another year of austerity in 1982. Hard currency debts, accumulated since 1974, haunted most countries of the region. Poland and Romania, unable to meet debt-repayment obligations, negotiated rescheduling agreements. The GDR, Hungary, and Yugoslavia obtained new loans, thus winning additional time to adjust their economies to the financial circumstances.

The corrective measures taken in all countries of the region to improve the balance of payments have included import restrictions, reduced domestic investments and consumption, and export stimulation. Export growth to hard currency areas, however, was thwarted by an economic recession persisting through 1982 in importing countries.

Internally, import restrictions invoked a chain reaction of reduced feed supplies, lower meat production, and meat shortages. Besides meat, sugar and vegetable oil were in short supply and, in Poland and Romania, were obtainable only with ration coupons. Import restrictions also hurt industrial growth, as they deprived some factories of raw materials, technology, and spare parts.

For 1982, lower economic growth targets were planned than for the preceding years, but even many of these targets turned out to be too ambitious. Only Bulgaria's

growth in national income exceeded 4 percent. The other countries in the region experienced low or lower-than-planned growth rates, and Poland suffered its fourth consecutive year of declining national income.

Growth in industrial production was the highest in Bulgaria—4 percent. The growth of agricultural production exceeded 4 percent in Bulgaria, Hungary, Romania, and Yugoslavia. In contrast, agricultural production declined in the GDR and Poland. Thus, the regional average growth rate was small. Crop production, conforming to plans, performed better than livestock output in each country. The relatively good results in agriculture helped to maintain this sector's share of national income, and agricultural products as a percentage of total exports increased in the southern countries.

Agricultural investment probably declined along with total investment. In Poland, agriculture has received priority in state investment allocations in the last 2 years; nevertheless, farm-sector investment in 1982 (in constant prices) declined 12 percent from 1981. The decline in total investment was 13 percent. Despite official policy, the share of agriculture in total investment in 1982 did not increase from the 1981 level of just over 18 percent. (Thomas A. Vankai)

Principal plan indicators, Eastern Europe, 1982 and 1983

Item	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia
<i>Percent change</i>							
National income							
1982 plan	3.6	0.5	4.8	1-1.5	¹ -8	5.5	2.5
1982 actual	4.0	0.4	3.0	2	-8	2.6	0.3
1983 plan	3.8	2.0	4.2	0.5-1.0	2-2.5	5.0	1.0
Industrial production							
1982 plan	4.5	0.8	4.6	2-2.5	¹ -10	5.6	3.5
1982 actual	4.6	1.0	3.2	2	-2	1.1	0.1
1983 plan	4.8	2.4	3.8	1-2	4	8.0	2.0
Agricultural production							
1982 plan	2.2	3.2	² 0.2	4-4.5	NA	6-7.9	4.0
1982 actual	4.7	1.1	-1.5	5	-4.5	7.5	7.0
1983 plan	2.7	2.7	NA	1-2	1.5-2.4	5.1-5.6	2.5
Capital investment							
1982 plan	NA	-2.5	NA	-6 to -5	-10	5.0	-6.0
1982 actual	³ -3	³ -1.1	-6	-2.5	-13	-2.5	-6.5
1983 plan	NA	NA	-10	-10	1.6	0.7	-20.0
Per capita real income							
1982 plan	3.0	2.6	4.0	0-0.5	NA	2.7	NA
1982 actual	3.0	NA	3.3	0.5	-19	NA	-4
1983 plan	2.8	NA	3	-1 to -0.5	NA	NA	NA

NA = Not available.

¹Worst variant. ²Agriculture and food industry. ³Socialized sector only.

Source: State plans and plan fulfillment reports in numerous publications.

CROPS

Weather was the decisive factor for 1982 yields. Favorable sowing conditions and proper seedbed preparations in the fall of 1981 provided a good start for small grain development in the whole region. The 1981/82 winter was the coldest in the last 10 years—except 1978/79 in the GDR and Poland—but it harmed only rapeseed, especially in Poland. Precipitation was about half the average from March through August in Poland, and half the average from July through August in the GDR. Inadequate moisture during the summer hurt potato development, but the dry conditions contributed to speedy small grain harvests with less-than-average losses in these two countries.

Estimated fertilizer use per hectare in Eastern Europe declined 1 percent in 1982, after an increase of 3 percent in 1981. Declines in Poland and Yugoslavia more than offset increases in Hungary and Romania. Fertilizer

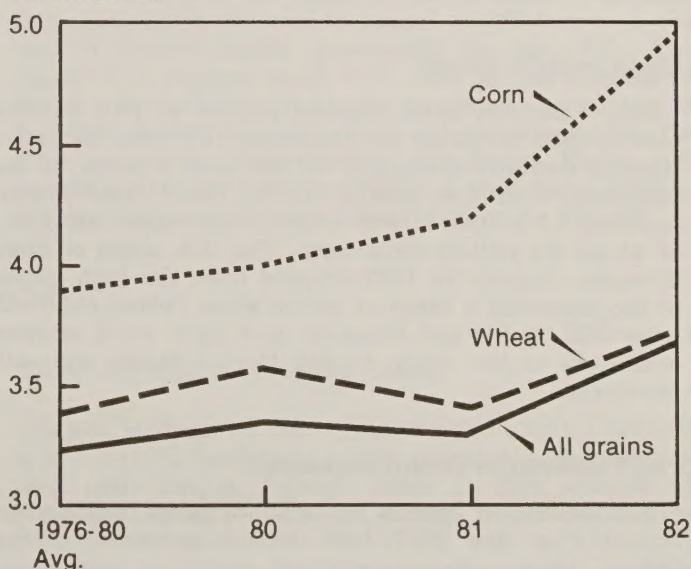
individual crops is not known, as only aggregate use is reported. In 1981/82, the use of manure intensified, replacing some of the nutrients lost by reduced fertilizer use.

Record Grain Harvest

Total grain production in 1982 is estimated at 105.7 million tons, up 11 million from the 1981 level and 9.7 million from the previous record in 1980 (table 1). Record production was reached in all countries except Czechoslovakia and Poland. Even in these two countries, the harvest was better than in 6 of the last 10 years. Good yields for both fall and spring-sown crops were the

Grain Yields in Eastern Europe

Tons/hectare



Fertilizer use in Eastern Europe¹

Country	1975	1980	1981	1982 ²
<i>Kilogram/hectare arable land</i>				
Bulgaria	157	199	250	250
Czechoslovakia	305	334	333	333
GDR	370	326	344	344
Hungary	276	262	278	290
Poland	236	244	235	227
Romania	88	113	103	106
Yugoslavia	90	105	128	123
Eastern Europe	199	212	219	217

¹Nitrogen, phosphate, and potassium in nutrients. ²Estimate.

Sources: Country yearbooks.

application stabilized in the rest of the countries. The declines generally occurred in the use of phosphate and potash, which have to be imported, with the exception of potash in the GDR. The actual effect of fertilizer on

main reason for improvement, as area sown was only about 1 percent larger than in 1981 (table 2). It was a rare coincidence that none of the East European countries were hit during the grain vegetation period by severe flood, drought, or frost.

All grains performed well. Wheat output exceeded 34 million tons, an increase of over 4 million from 1981, but below the high attained during 1976-78. Coarse grain output reached 72 million tons, increasing by 8 million. One-third of the grain produced in the region is corn, 97 percent of which is in the four southern countries. Corn was the top performer last year.

Corn yields per hectare were 29 percent above the 1976-80 average and 19 percent more than 1981's results. Wheat yields were up 9 percent. In addition to favorable weather, the Hungarian agricultural weekly, *Magyar Mezőgazdaság*, in its second issue of 1983, attributed the good results for corn to:

- Excellent seed germination leading to 8 to 10 percent more plants per hectare than in any previous year.
- Completion of deep plowing in fall.
- Proper preparation of seedbeds.
- Adequate use of fertilizer.
- Effective eradication of weeds.
- Timely use of machinery.

The Bulgarian Telegraph Agency on December 30, 1982, attributed Bulgaria's successful corn crop to improved farm organization and the introduction of managerial incentives. Particularly effective was the new policy making farm teams accountable for the level of production on designated areas. Dr. V. Trifunovic, quoted in *Borba* (December 24, 1982), attributed the record corn harvest in Yugoslavia to new, higher yielding hybrid seeds, the extensive use of weed-killing chemicals, and the large stock of farm machinery.

Approximately two-thirds of the total grain supply in Eastern Europe is used for livestock feeding, including one-third of the wheat and one-half of the rye. Because this year's wheat has been of good milling quality, less wheat will be imported for human consumption this marketing year than in previous years.

Grain Imports Lower

East European grain imports peaked at 18.6 million tons in 1980, following the disastrous 1979 crop (table 3). Imports declined drastically in the next 2 years, to an estimated 9 million tons in 1982. The United States exported 3.5 million tons of grain to the region last year, of which 3.2 million were corn. The U.S. share of East European imports in 1982 dropped from the high levels of the preceding 3 years—a period when Poland obtained huge CCC credits and Romania used tight world market conditions to buy grain in the United States and sell elsewhere.

Fall Plantings of Grains Increased

Fall sowing of grains in 1982 increased slightly or remained at the 1981 level in all countries except Poland, where extremely dry soil conditions resulted in

less-than-planned sowing. Emergence and tillering began slowly because of dry soil, but the unseasonably warm weather through January helped root development. The lack of frost, however, has made the plants more susceptible to diseases. In Poland, more spring replanting than usual is likely.

Oilseed Production Up Slightly

Production of the major oilseeds in Eastern Europe—rapeseed, sunflowerseed, and soybeans—increased 2 percent to about 4 million tons in 1982 (table 4). This increase was due to much higher soybean yields, while production of sunflowerseed and rapeseed declined slightly because of reduced area (table 5).

Sunflowerseed production fell 4 percent in 1982, to 2.2 million tons, while sunflowerseed area was 7 percent lower than in 1981. A significant cause of this downturn was the continued disease problems in Yugoslavia, which caused that country to reduce its sunflowerseed area to the lowest level since the early 1960's. Largely because of a worse-than-normal winter, rapeseed production also registered a small decline to 1.1 million tons—4 percent below the 1981 amount. Soybeans were the only major oilseed in the region for which production was larger. Favorable summer weather in the southern countries allowed production to increase 41 percent to 730,000 tons. Virtually all of the increase was accounted for by better yields, which jumped 37 percent.

Oilseed Meal Consumption Plummets

The worsening financial situation of many East European countries caused a major drop in both imports and consumption of oilseed meal in 1982. This development represented a break from the trend of the last few years, in which oilseed meal consumption was increasing roughly 4 to 5 percent annually. In 1982, consumption dropped 14 percent, while the fall in imports of oilseed meal was even more significant—20 percent. Poland and Romania accounted for almost all of these declines. The smaller supply of oilseed meal led to a reduction in both hog and poultry numbers for the region. In Poland, mixed feed production was reduced by one-third in 1982, partly as a result of lower oilseed meal supplies.

Oilseed meal utilization¹, Eastern Europe, 1978-82

Item	1978	1979	1980	1981	1982 ²
1,000 tons					
Processing from domestic crops ³					
Soybean meal	248	299	425	421	343
Sunflower meal	640	614	729	626	724
Rapeseed meal	586	667	325	651	576
Fish meal	90	89	86	82	77
Imports					
Oilseed meal	3,941	3,971	4,394	4,674	3,694
Soybeans ⁴	553	639	679	538	535
Sunflowerseed ⁴	46	66	27	37	34
Fish meal	453	508	383	309	325
Exports					
Oilseed meal	50	18	29	11	13
Apparent meal consumption	6,507	6,835	7,019	7,327	6,295

¹Including fish meal. ²Preliminary. ³Estimated from preceding year's harvest minus exports. ⁴Converted to meal equivalent.

Sources: Country yearbooks and *FAO Trade Yearbook*.

The prospects for 1983 are for little, if any, recovery. Certainly, the need for imports exists, and Yugoslavia and Hungary will be receiving CCC credit for soybean meal imports. However, Poland, which imported some of its oilseed meal on credit last year, may find it difficult to locate credit in 1983 and to keep imports from falling further this year.

Oilseed Planting Intentions

Rapeseed area sown this fall was smaller than last year and well below planned levels. In Poland, low profitability and very dry soil conditions in the fall resulted in only 290,000 of the planned 450,000 hectares being sown with rapeseed. Furthermore, the crop in that country was in generally poor condition going into dormancy. However, the mild 1982/83 winter may have alleviated the threat of above-normal winterkill.

Soybean area in Eastern Europe should be larger in 1983 because of further expansion in Yugoslavia, by as much as 65,000 hectares. However, no expansion of sunflowerseed area is anticipated in the region. Total oilseed production is expected to show little, if any, increase in 1983.

Sugar Beet Production Improves

Total 1982 sugar beet production in Eastern Europe was about 49.5 million tons, 1 million above 1981. The production of refined sugar, at 5.2 million tons, was up 2 percent. Czechoslovakia, Bulgaria, Romania, and Hungary showed significant improvements in sugar beet production, but there were declines in the other countries. In the GDR and Poland, the crop was hurt by planting delays due to a rainy spring and by a hot, dry summer. Poland also suffered from a shortage of fertilizer and plant protection agents. Yugoslavia's harvest was down because of smaller planted area and poor growing conditions during the spring. Only slight changes are planned for 1983: Yugoslavia is planning an increase in acreage, while Hungary is planning a reduction; other countries plan no change.

Despite the lower sugar beet production, Poland's sugar output was a record 1.85 million tons, almost 6 percent higher than in 1981. Because of the warm, sunny weather during August and September, the sugar content of the beets was sharply higher. Nevertheless, the East European countries continued to experience lower sugar yields than most Western developed countries.

One reason for relatively low sugar yields is the prolonged harvesting period because of a lack of proper mechanization. In Romania, for example, the harvest had to begin earlier than was optimal, when the beets were smaller, and the sugar content lower. Hungary had a yield of 4.2 tons of refined sugar per hectare of sugar beets planted, in contrast to 8 tons in Austria. Beets in

Czechoslovakia had a sucrose content of 14 to 15 percent, while Yugoslavia only managed 13 percent, in contrast to 17 to 18 percent in Austria.

Potato Production Down

Potato production in Eastern Europe in 1982 was 53 million tons, down 18 percent from 1981. Acreage was 2 percent less than a year earlier. Bulgaria and Romania showed some production increases, but these were more than canceled out by sharp declines in Poland (down by about 25 percent) and the GDR (15 percent). Drought during the summer was the main cause of the lower harvest (tables 4 and 5).

Approximately half of the potatoes produced in the GDR and Poland are used for feed. The potato shortfall of 14 million tons in those countries implies that over 3 million tons of additional grain will be needed this year to maintain the current hog inventory. The good grain harvest should accommodate some of this additional demand for feed, but the feed supply in these two countries will nevertheless suffer.

Tobacco Production Rises

Total tobacco production rose from 350,000 tons in 1981 to about 385,000 in 1982, mainly because of sharp rises in Yugoslavia, Bulgaria, and Romania—the result of higher yields. The only major producer of tobacco in the region is Bulgaria, although other countries are planning to increase their output in order to reduce their dependence on imports. Tobacco imports from the United States have dropped by more than one-half from the 4,000 tons in 1981. U.S. exports of tobacco to Poland were zero, and those to Czechoslovakia and Romania were minimal.

Cotton Imports Stable

Only Yugoslavia and Bulgaria are producers of cotton, and all countries in the region are net importers of cotton, the main supplier being the Soviet Union (table 6). There has been no change in imports from the USSR, although the already small share of cotton imports from the United States became even smaller in 1982. However, U.S. exports to the region should be higher this year, as Yugoslavia is expected to import 40,000 tons with the help of export credits guaranteed by the CCC. The higher U.S. exports could well come at the expense of Soviet cotton shipments to the region as the quality of the 1982 Soviet crop was poor and export supplies for 1983 are tight. Nevertheless, the Soviet Union will remain the major supplier of cotton to Eastern Europe. (Nancy Cochrane, Edward Cook, Thomas A. Vankai)

LIVESTOCK

Livestock production in 1982 was more firmly tied to domestic feed availability than in previous years. The limited funds available for importing feed forced all countries to de-emphasize livestock production and suppress meat consumption, either through price measures or market shortages. Pricing policy favored cattle and sheep against hog and poultry to tilt feed demand away from concentrates toward roughages.

Cattle and Hog Inventories Lower

Cattle holdings in the region dropped about 1 percent to 37.3 million head during 1982, principally because of a herd reduction in Poland (table 7). The number of cows—16.9 million—remained steady. Hog numbers were down about 3 percent to 70 million, with only Hungary reporting an increase. Sheep numbers were slightly

higher, reflecting sheep's lesser dependence on grain and protein meal. Romania was the only country in the region not providing data on yearend inventories, thus the assumption of a recovery in its cattle sector is based on official statements only.

Meat Production Declines

Meat production declined about 3 percent, with higher beef output only partially offsetting a sharp drop in pork and poultry (table 8). Beef production in Poland increased at the expense of the cattle inventory, which may lead to a lower output in 1983. The mix of meat produced changed significantly because dressed poultry output in Poland dropped by roughly 250,000 tons. This reduction was the consequence of feed shortages, which forced the closing of the majority of state-owned broiler factories. In the past, these enterprises relied totally on corn imports from the United States financed by U.S. credit guarantees. Though still not enough to suspend rationing, aggregate meat output in Poland was slightly higher in 1982 than in 1981.

The meat supply was also tight in Romania. In addition to inadequate concentrated feed allocations for livestock producers, imports of feed additives were curtailed, contributing to more animal disease and larger-than-normal mortality rates. The Romanian leadership put the blame for the shortfalls on deficiencies in livestock feeding techniques, improper care, and poor breeding practices.

The region's milk and egg production each declined 2 percent. The GDR and Romania suffered the largest drop in milk production, and Poland had the largest decrease in egg output.

Meat Rationed in Poland and Romania

Per capita meat consumption in 1982 is estimated to have dropped sharply in Poland, from 65 to about 58 kilo-

grams (bacon included)—the lowest level in a decade and among the lowest in Eastern Europe (table 9). Despite higher prices, shortages in Poland and Romania forced the Governments in these countries to continue meat rationing for the second consecutive year. Price hikes dampened demand in the rest of the countries. Czechoslovakia reported a drop of about 6 kilograms in per capita meat consumption, from a relatively high 86.6 kilograms in 1981. The proportion of the type of meat consumed also shifted in favor of beef. Poultry consumption dropped throughout the region, most sharply in Poland.

Meat Trade Pattern Unchanged

Eastern Europe remained a net exporter of live animals, meat, and meat products. Meat and meat product exports have exceeded 1 million tons annually since 1979. Hungary has been the leading exporter, followed by Romania. The other countries have also been net exporters, except Poland, which became a net importer in 1981. Exporting high-value meat products and importing lower grade meats for sausages are the prevalent trade patterns. The USSR is Eastern Europe's most important market. Exports to the European Community (EC) have exhibited a downward trend. The Middle East was an expanding market for cattle and sheep until recently; reduced oil income has impeded the growth of Mideastern meat consumption.

The United States is an important outlet for processed meat, mainly canned ham, but East European exports to this country declined from a peak 77,000 tons in 1979 to 39,000 in 1982. All countries except Yugoslavia reduced their exports to the United States. In particular, imports declined the most from Poland and Romania where the gaps between domestic production and demand were particularly large. (Thomas A. Vankai)

FOREIGN TRADE AND FINANCE

For the first time in almost a decade, Eastern Europe, with the exception of the GDR where official 1982 trade data are unavailable, nearly balanced its foreign trade last year; exports were valued at \$67.9 billion, and imports at \$68.2 billion. Excluding the GDR, the region had a trade deficit of only \$325 million; down from \$7.1 billion in 1981 (table 10). All countries have not yet released official results of 1982 convertible currency trade. However, press reports from every country except Yugoslavia indicate an export surplus on convertible currency trade. Yugoslavia reported a substantial lessening of its hard currency trade deficit. In Poland, the export surplus with non-CEMA members (Council for Mutual Economic Assistance), conducted largely in convertible currencies, rose to the equivalent of \$1.5 billion in 1982, from less than \$75 million in 1981.

Most trade among CEMA members is denominated in rubles, and 1982 data on this trade are incomplete. However, it is likely that all countries except Bulgaria and Hungary registered improvements in their ruble-account trade last year. This reflects the trend of the overall trade balance and growing Soviet concern over annual trade surpluses with most CEMA countries, which totaled 1.7 billion rubles in 1981 (1 ruble = \$1.39). In

general, the improved balances resulted from higher exports to fellow CEMA members, primarily the Soviet Union. For example, Polish exports to CEMA countries were up 24 percent in 1982, while imports from these countries rose less than 4 percent.

The improvement in 1982 trade balances was achieved through reduced imports rather than larger exports. Last year, exports from the region (GDR excluded) fell 5 percent, while imports were down more than 13 percent in current prices. Most of these declines occurred in the three economically hardest hit countries of Eastern Europe: Poland, Romania, and Yugoslavia.

Officials in Eastern Europe continued to stress increased trade with fellow CEMA nations. Recession in the West dampened demand for the region's exports, and restrictions on imports financed by hard currencies raised the importance of supplies from the USSR and other East European countries. For example, Romanian officials, whose country has traditionally had one of the lowest shares of trade conducted within the region, reported a substantial increase in 1982 over 1981.

Polish authorities reported that imports of some Soviet raw materials continued above plan levels in 1982 to bolster the Polish economy. Major agricultural products

included a "grain loan" of just under 500,000 tons, 5,000 tons of cotton, and 4,000 of wool. Idle Polish industrial capacity will be used to process the extra wool and cotton, with Poland retaining half the output and the remainder being reexported to the Soviet Union as partial repayment. However, Soviet assistance to Poland was likely less than in 1981. Polish exports to the USSR increased in 1982, while imports from that country fell, resulting in a 62-percent drop in Poland's trade deficit with the USSR in terms of current prices.

To induce foreign trade organizations (FTO's) and selected enterprises to expand exports, more than half the countries of the region have devalued their currencies against Western currencies since the beginning of 1982. Most East European currencies are highly overvalued, and the devaluations, ranging from 14 percent in Hungary to 130 percent in Poland, were long overdue. However, foreign trade in Eastern Europe is, to varying degrees, a State monopoly, and the region's currencies are not convertible, reducing the impact of the devaluations on domestic economies. Only in Yugoslavia and Hungary will the devaluations have a noticeable influence on foreign trade. The devaluations should encourage FTO's and some large enterprises to increase exports and decrease imports because of the relatively, by East European standards, market-oriented nature of the Yugoslav and Hungarian economies. The economic influence of devaluation will be less important in Poland, and least in Romania, where only the tourist rate was devalued and where barter is used extensively.

Agricultural Trade Balance Improves

The agricultural trade deficit of Eastern Europe last year was probably lower than the \$4 billion reported in 1981, although complete 1982 data are unavailable. The agricultural trade deficit of Poland, the region's largest food importer, dropped by almost 40 percent to the equivalent of \$1.5 billion in 1982. In Czechoslovakia and Poland, demand for feed decreased as a result of declining livestock numbers. The regionwide retreat from longstanding policies encouraging rising per capita meat consumption also contributed to decreased imports. Lower agricultural imports have long been a target of officials. Unlike raw material and machinery imports, agricultural imports have not, for the most part, been used to produce exports.

Severe Debt Problems Continue

The net hard currency debt of Eastern Europe declined last year because of restrictive macroeconomic policies, trade surpluses, and reduced credit availability. However, despite a decline in debt—from \$81 billion in 1981 to approximately \$75 billion at the end of 1982—the region continued to experience major problems in meeting its repayment obligations. The external debt of all countries declined, with the exception of Poland, where it remained unchanged, and Yugoslavia, where it increased. While Poland's debt, the largest in Eastern Europe, remained at approximately \$25 billion, its debts to CEMA countries, primarily the Soviet Union, reportedly increased from the equivalent of \$4.3 to \$4.9 billion. The other major

debtors of the region are Yugoslavia, the GDR, and Romania.

Estimated net hard currency debt, Eastern Europe, yearend 1981 and 1982

Country	1981	1982
<i>Billion dollars</i>		
Bulgaria	2.6	1.7
Czechoslovakia	3.8	3
GDR	13	9.8
Hungary	7.9	7.2
Poland	25	25
Romania	10.8	9.1
Yugoslavia	18.4	19.1
Total	81.5	74.9

Sources: Wharton Econometric Forecasting Associates; International Trade Administration, U.S. Dept. of Commerce; *Trybuna Ludu*, Jan. 14, 1983; *Borba*, Jan. 27, 1983.

In November 1982, Polish officials reached agreement with foreign banks to reschedule commercial debt coming due in that year. The Polish agreement reportedly rescheduled, over an 8-year period, payment of 95 percent of the principal due in 1982, with the remaining 5 percent to be paid in 1983. However, this agreement covered only about 40 percent of Poland's estimated 1982 repayment obligations of \$10 billion. In response to the imposition of martial law, Western governments declined talks last year on rescheduling Poland's debts guaranteed by these governments.

In a separate agreement with the banks, one-half of any interest payments made by Poland are to be re-lent immediately to the country as short-term loans. Although these credits will enable Poland to finance imports of essential raw materials, including agricultural products, they are not a net addition to Poland's foreign currency reserves, as the outflow to the banks is larger than the approximately \$550 million expected in fresh credit.

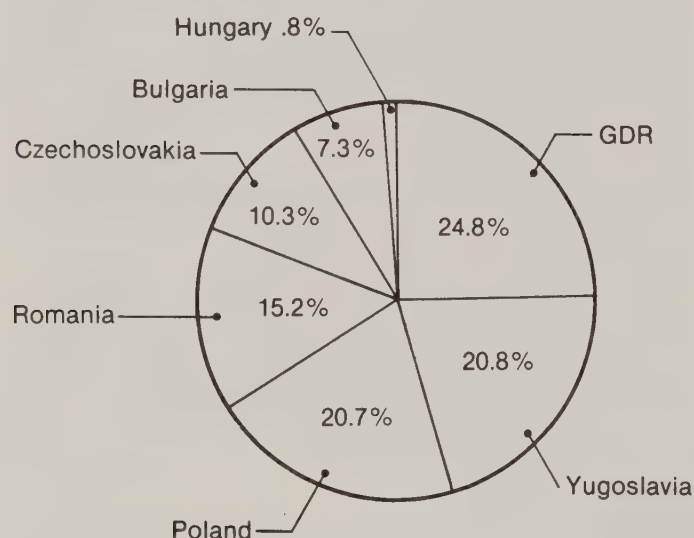
In late July 1982, Romanian officials reached an agreement with the country's government creditors (the so-called "Paris Club") on guidelines for negotiating separate bilateral rescheduling agreements for Romania's 1982 debt guaranteed by foreign governments. According to these guidelines, 80 percent of the principal and interest due in 1982 on medium- and long-term loans, plus unpaid 1981 obligations, are to be rescheduled, with repayments on the principal beginning in late 1985. These guidelines also formed the basis for a rescheduling agreement with foreign banks on commercial debt repayments for 1982. This agreement was signed by Romanian and foreign bank officials in December 1982.

Yugoslavia has avoided rescheduling through an economic aid package assembled by 15 Western governments, including the United States. The package consists of new loans and a rollover of maturities. For a more complete discussion of the aid package see "Yugoslav Agriculture: Performance and Outlook" in this report. (Robert Cummings)

U.S. AGRICULTURAL TRADE

The East European market for U.S. agricultural exports continued to shrink in 1982. U.S. agricultural exports to Eastern Europe last year were valued at \$877 million (including transshipments), less than 50 percent of the 1981 value and the lowest since 1973 (table 11). Agricultural transshipments were valued at \$44 million last year and accounted for less than 5 percent of exports to the region, down from 7 percent in 1981. Exports were down to all countries except to Czechoslovakia and Yugoslavia. The declines were particularly severe for exports to Poland and Romania, where shipments fell by two-thirds. U.S. farm exports to Eastern Europe represented only 2.4 percent of all such exports from the United States, less than one-half the 1976-80 average. Because of lower agricultural shipments, the U.S. trade surplus with Eastern Europe declined to \$415 million in 1982, the lowest level since 1977.

Individual Country Shares of U.S. Agricultural Exports to Eastern Europe, 1982



There was a substantial change in the individual country shares of U.S. agricultural exports to Eastern Europe in 1982. The GDR was our largest East European customer in 1982, taking close to one-quarter of U.S. agricultural exports to the region. Poland and Romania, our first and second markets in 1981, dropped to third and fourth place, respectively. Yugoslavia nearly doubled its market share to become our second largest market. Of the seven major agricultural commodities shipped to Eastern Europe, only soybeans, vegetable oil, and cattle

Volume and value indices of the major U.S. agricultural exports to Eastern Europe in 1982

Commodity	Volume	Value
1981 = 100		
Wheat	72	63
Feed grains	47	37
Soybeans	108	95
Vegetable oil	147	155
Soybean meal	42	36
Cotton	48	32
Cattle hides	163	153

Source: Bureau of the Census, U.S. Department of Commerce; *U.S. Export Sales*, FAS/USDA.

hides registered volume increases, and only vegetable oil and cattle hides showed increases in export values.

The share of agricultural commodities in total U.S. exports to Eastern Europe dropped from roughly two-thirds in 1981 to 55 percent last year. East European restrictions on purchases of agricultural products were likely stronger than those placed on imports of industrial raw materials and high-technology products.

Agriculture's share of total U.S. exports to Eastern Europe, 1977-82

Country	1977	1978	1979	1980	1981	1982
Percent						
Bulgaria	11.2	83.0	72.6	80.6	79.1	60.1
Czechoslovakia	82.8	75.4	92.1	87.0	75.1	80.8
GDR	98.1	92.6	95.1	95.5	96.7	92.1
Hungary	51.4	53.9	34.0	37.7	16.6	10.5
Poland	67.5	74.8	82.6	81.4	87.2	61.8
Romania	45.5	47.4	67.8	65.4	75.3	59.8
Yugoslavia	19.9	23.4	40.7	38.0	22.6	32.8
Eastern Europe	57.3	57.8	69.8	69.4	66.5	55.0

Source: Bureau of the Census, U.S. Dept. of Commerce.

Exports of Most Commodities Off Substantially

In 1982, the United States exported 3.5 million tons of grain (valued at \$419 million) to Eastern Europe, down from 7.2 million in 1981 and 10.4 million in 1980 (table 12). Corn remained the most important grain exported—3.2 million tons (\$369 million). Wheat exports fell to 334,200 tons, valued at \$50 million, from 465,000 tons in 1981.

The U.S. share of the East European grain market declined last year. Imports from the United States likely accounted for about one-third of the region's grain purchases, down from an average 45 percent during 1977-81. While East European corn purchases remained largely from the United States, the U.S. share of the wheat market fell. In 1981, 8 percent of the imported wheat was from the United States, down from an average 28 percent during 1976-80.

The major reason for the declining U.S. share is competition from other suppliers. Canadian and EC suppliers have been successful, for example, in expanding their shares of the East European wheat market over the last few years. The Canadian Wheat Board announced in late January 1983, a 1-million ton grain sale to the GDR on 2-year official credit. Wheat and feed barley will be the major grains exported. As a result, the U.S. share of the 1983 GDR grain market may suffer.

GDR officials have reportedly also taken advantage of the "swing credit" with the Federal Republic of Germany (FRG) to finance grain imports. Grain from the FRG under this type of credit is bought at the internal EC price, which is higher than the world price, but financing is interest free and repayable by exports. The region's generally poor financial standing in commercial lending markets and current U.S. Government restrictions on extending CCC export credit to all East European countries except Hungary and Yugoslavia indicate no immediate recovery in U.S. market shares, especially in the face of other suppliers' less stringent export credit policies.

Exports of U.S. soybeans rose slightly to 546,000 tons (\$131 million) last year, from 507,000 tons in 1981. Exports to Romania were up significantly, but those to Yugoslavia were down. Meanwhile, exports to Poland recovered slightly. Exports of U.S. soybean meal and cake fell almost 60 percent to 524,000 tons (\$131 million). Since the peak export year in 1980, U.S. shipments of soybean meal and cake have declined almost 70 percent. Exports were lower to all countries except Czechoslovakia. Vegetable oil exports, which are traditionally small, rebounded in 1982 because of larger purchases by Yugoslavia. In 1982, Eastern Europe virtually disappeared as a market for U.S. cotton.

U.S. cattle hide exports increased by nearly 1 million pieces in 1982, to 2.5 million (\$71 million), on the strength of higher Polish and Romanian imports. Hides can be reexported as leather goods, and this may explain the larger purchases.

U.S. agricultural imports from Eastern Europe fell for the fifth straight year in 1982, to \$228 million, 18 percent below 1981 (table 13). Lower imports from Poland and Romania account for the decline. Processed meats (primarily canned ham and sausages) continued to dominate imports.

CCC Credits Once Again Authorized; Food Aid Extended to Poland

CCC credit authorizations for Eastern Europe currently amount to \$277 million for fiscal 1983. No credits were made available to Eastern Europe in fiscal 1982. Yugoslavia currently has \$235 million in credit guarantees, including a \$60 million "blended credit" for cotton purchases. Under the blended credit program, 20 percent of the total credit is direct, interest-free GSM-5 credit, with the remainder made up of GSM-102 credit guarantees. This credit will guarantee an additional market in

Yugoslavia, because the country has not been a traditional importer of U.S. cotton. Other commodities covered by CCC credit guarantees for Yugoslavia are oilseeds, protein meals, wheat, hides, and vegetable oil. Also, Hungary has received credit guarantees totaling \$42 million for fiscal 1983—\$38 million for protein meal, \$2 million for protein isolates, and \$2 million for cotton.

In October 1982, the U.S. Government suspended the application of most-favored-nation (MFN) tariff rates of duty on imports from Poland. This action was taken because the Polish Government failed to meet the import commitments under its accession protocol to the General Agreement on Tariffs and Trade (GATT) and because it outlawed the Solidarity trade union. The U.S. Government also continued its policy of not considering Polish requests for CCC credit because of the imposition of martial law in December 1981. Poland has traditionally been the largest East European recipient of CCC credit. The CCC credit eligibility and MFN tariff status of Romania will also be suspended effective June 30, 1983, unless officials there stop implementation of a recent education tax on emigrants. CCC credit has played an important role in maintaining significant export markets in these countries, and the lack of credit eligibility means no recovery in these markets this year.

The U.S. Government continued to make food aid available to the Polish people. Under Title II of the P.L.-480 program, donations from the U.S. Government to voluntary relief organizations, primarily CARE and Catholic Relief Services, were authorized in fiscal 1982 at a cost of \$40.7 million, with an additional \$40 million authorized for fiscal 1983. The following food aid was exported to Poland in fiscal 1982: butter (700 tons), non-fat dry milk (1,400 tons), wheat flour (15,900 tons), rice (3,200 tons), oats (500 tons), wheat-soya blend (8,400 tons), corn, soy, milk blend (6,600 tons), soybean oil (6,300 tons). Current U.S. trade sanctions against Poland do not affect this assistance, as it is humanitarian aid. (Robert Cummings)

AGRICULTURAL POLICIES

Raising the level of self-sufficiency in food consumption remained a primary objective in all countries of the region. Without adequate investment funds, the countries relied on better mobilization of domestic resources, reduced inputs per unit produced, and lower consumption levels to attain their goals. Making management more responsible for efficient production, realigning prices to better reflect production costs, and relaxing the obstacles to private farming have been the primary tools used to achieve the objectives.

Those countries with rigid, centrally managed economies—Bulgaria, Czechoslovakia, the GDR, and Romania—have tested certain features of the quasi-market economies of Hungary and Yugoslavia, where decisionmaking is at the enterprise level, some prices are allowed to fluctuate, and managers and workers are motivated by profit-sharing schemes and bonuses. But, none of these countries have granted as broad authority to their farm managers as Hungary and Yugoslavia have.

Management Decentralized

Some agricultural decisionmaking in Bulgaria and Romania has been shifted from the national level to the counties. Each county must strive for self-sufficiency in

production and finances. To do this, the county administrator can grant greater leeway to farm managers, and they in turn to the brigades (a team of workers), for fulfilling approved production plans. The county administrator is ultimately responsible for seeing that the farms sell to the central Government a quota of designated commodities at prearranged prices. This approach of striving toward regional self-sufficiency has led to production diversification instead of a continuing trend toward specialization.

The GDR in 1975 divided more than 4,000 farms into separate livestock and crop enterprises. This reorganization has not fared well, and the authorities are presently preoccupied with stimulating cooperation among these artificially separated enterprises. Czechoslovakia, in January 1982, introduced the so-called "New System of Planned Management of the National Economy" into the agricultural sector. This new system involves monetary incentives to managers and bonuses for plan fulfillment or profitable innovations. Farm managers, however, in all East European countries, even in Hungary and Yugoslavia, operate within certain centrally determined constraints regarding the use of labor, distribution of profits, and marketing of products.

Prices Raised

Government procurement prices of field crops and livestock, as well as retail prices of many staple foods—meat, milk, bread, and sugar—are centrally controlled in all countries of the region. Retail price increases are usually announced in conjunction with wage increases or other incomes policies to moderate public discontent. Changes in the price relationships among agricultural commodities and between input and output prices have been used by governments to influence managerial decisions. Often the administered prices lead to inappropriate resource use, waste, and misguided choices between alternative production opportunities.

International prices are used to varying degrees, particularly in Hungary and Yugoslavia, as guidelines in price fixing and for reducing input subsidies. In Hungary, for example, subsidies for chemicals were cut 50 percent, and subsidies for all types of energy and for imported protein feed were abolished. To partially compensate for the resulting increase in production costs, procurement prices for agricultural commodities in Hungary were raised at the beginning of 1983 by an average 3.7 percent.

Producer prices are usually changed once annually, retail prices less frequently. This has not been true for Yugoslavia, however. Retail prices there increased 19 percent during January-July 1982. Following the steep price rise, the Yugoslav Government announced in August 1982, a price freeze that lasted until February 1983, when food prices were marked up an average 22 percent, of which fresh meat prices were raised 28 to 33 percent. Food prices in all countries were increased significantly at the end of 1981 or early 1982. In August, Hungary announced some additional price increases for bread, rice, tropical fruit, and cocoa.

Food Shortages Continue

Poland continued nationwide rationing because supply did not satisfy demand for a large variety of foods, despite drastic retail price increases. Higher monetary incomes exerted pressure on the food supply in Romania and Yugoslavia. Romania entrusted rationing to local authorities, so it varied by regions; rationing was limited to meat, cooking oil, and sugar. In February 1983, rationing was introduced for cooking oil and coffee in Belgrade, Yugoslavia, following similar actions in other localities throughout the country.

Difficulties in Grain Procurement

In Poland and Yugoslavia, where about three-quarters of the grain is produced by private farmers, government

authorities have perennial difficulties buying grain at official prices. Those difficulties heightened last year as farmers' confidence in national currencies eroded. In Poland, distrust in the Government thwarted even the barter of state-supplied mixed feeds or coal for grains. Both Poland and Yugoslavia, reluctant to resort to compulsory deliveries, were forced to import more grain than warranted by domestic stocks.

Private Production Stimulated

Poland and Yugoslavia are resigned to tolerate predominantly private landownership. In all of Eastern Europe, private producers are no longer considered as disruptive elements in the socialized agricultural structure. Their importance is recognized in all countries, and their activities are encouraged. Discrimination against private producers in access to inputs has been reduced. The right to inherit land was strengthened in Poland, and the area of land an individual can own was enlarged to 50 hectares, or up to 100 hectares in the western provinces. By purchasing more land from the State Land Fund than they did in previous years, Polish private farmers increased their holdings by 100,000 hectares in 1982.

While private farmers are the dominant producers in Poland and Yugoslavia, the contribution of private farmers to total agricultural production is really quite significant in all countries. In countries with predominantly socialized agricultural systems, individuals are allowed to cultivate up to one-half hectare of land, on which they grow mainly fruit, vegetables, and livestock feed. In recent years, some countries have permitted individuals to rent additional land kept fallow or deemed unsuitable for large-scale cultivation. Last year, Czechoslovakia began exempting private producers from income taxes if farming is conducted in their spare time in addition to full-time work.

Private farmers are concentrating on labor-intensive and higher-value production. For example, their contribution exceeded one-half of the fruit and one-third of the meat and vegetables produced in Bulgaria. Private farmers' share of these products is similarly high in Hungary and Romania. In the GDR, small producers contributed about 28 percent of the vegetables, 60 percent of the fruit, and 48 percent of the eggs produced in 1982.

State and collective farms in every country are urged to contract with individuals, primarily for livestock products. Usually, socialized farms provide breeding stock and feed to private producers and repurchase finished products at preset prices. In this way, private producers are well integrated into the socialist farming system. (Thomas A. Vankai)

OUTLOOK FOR 1983

Official concern over agricultural performance has taken on a new urgency in Eastern Europe. The region can no longer finance imports of agricultural products at previous levels, and present domestic production capabilities are insufficient to maintain past per capita food consumption in several countries. Economic growth rates in all countries will remain below those of several years ago, limiting new agricultural investment and compound-ing supply problems.

Crops Emphasized

As a result of restrictions on feed imports, crop production is planned to grow faster in all East European countries than livestock output. Early prospects for the crop sector in 1983 are generally favorable. Winter grain area in four of the countries—Czechoslovakia, the GDR, Hungary and Yugoslavia—was reported larger than in 1982. Spring sowing in 1983 is planned at about last year's level, and it has proceeded at a faster pace this year than

last. However, following a mild and relatively dry winter, soil moisture was low in the spring, reducing prospects for good yields unless adequate precipitation occurs. The moisture situation is particularly severe in Bulgaria and Romania. Reduced chemical use in some countries could also cancel out some of the expected production gains in countries where the fall sown area was higher.

Total oilseed production is expected to show little, if any, increase in 1983. Despite a one-third increase in fall rapeseed area in Czechoslovakia, total rapeseed area in the region will be substantially below planned levels. In Poland, low profitability and dry soil conditions in the fall allowed only about two-thirds of the planned 450,000 hectares of rapeseed to be sown. Soybean area should continue to expand, largely because of higher sown area in Yugoslavia. No expansion of sunflowerseed is anticipated in the region.

Little change is expected this year in the overall area of the other major crops, sugar beets and potatoes, although Hungarian officials plan to reduce sugar beet area in response to low world sugar prices. Also, because of dwindling arable land, the larger winter grain plantings may force a decline in the area of some other crops.

Meat Output Will Likely Stabilize

Meat production is expected to stabilize at the 1982 level. Only Romania plans livestock rebuilding after its relatively good grain harvest. Reduced livestock numbers at the end of 1982 point to another difficult supply situation in Poland, where meat production is expected to decline. The maintenance of the present meat ration in Poland is in jeopardy unless either meat imports are raised or exports curtailed. Polish per capita consumption of meat may further decline unless the broiler factories are reopened with additional feed imports.

According to Hungarian assessments, export markets for high-quality beef look promising, although market growth in Mideast oil-producing countries will not be as great as in previous years. However, economic recovery, sustained by lower oil prices, may stimulate meat consumption in Western oil-importing countries, opening up wider markets for East European livestock products. The Soviet Union, the largest outlet for East European meat exports, will continue to be a good market for medium- and low-quality products, because Soviet meat production is not growing fast enough to satisfy demand.

Farm Imports Will Not Increase

The economic belt-tightening that is continuing in Eastern Europe this year will be reflected in agricultural imports. Grain imports, after declining from 15.9 million tons in 1981 to approximately 9 million in 1982, are

expected to decline further to about 8.5 million in 1983. A larger-than-usual share of the 1983 imports will be covered by intra-East European trade, particularly from Hungary and Bulgaria, which will each export close to 1 million tons of wheat. Also, Hungary, Romania, and Yugoslavia will be net corn exporters this year.

During January-April 1983, the United States exported only 480,000 tons of corn to Eastern Europe, compared with 1.54 million a year earlier. U.S. corn exports to the region will possibly reach only 1.75 million tons at best this year, down from 3 million in 1982. No significant exports of U.S. wheat are likely in 1983.

The import outlook for oilseeds and oilseed products this year is mixed. Soybean meal imports should be below 1982's depressed level, although soybean imports should be somewhat higher because of CCC financing for U.S. exports to Yugoslavia and higher estimated imports by Poland. Vegetable oil imports from the United States are expected to be higher, with CCC financing guaranteeing Yugoslav purchases of a minimum 130,000 tons.

U.S. farm exports to Eastern Europe are currently estimated at \$816 million for fiscal 1983, \$154 million below fiscal 1982 (corrected for transshipments). Major assumptions underlying this estimate are continued tight foreign credit and restrictive import and domestic consumption policies in the region.

Little Recovery in Input Use Expected

Official rhetoric in support of agriculture has risen as food consumption levels—a highly political issue in Eastern Europe—have become more dependent on domestic supplies. However, little immediate increase in agricultural investment and input use is likely, including in Poland, where the agricultural and food-processing sector is one of the three areas of the economy with a priority claim on investment during 1983-85. Polish officials had hoped to devote 30 percent of total investment to agriculture this year, but this goal has been pushed back to 1985.

Use of fertilizer, pesticides, and herbicides will show no growth throughout the region and should even decline in Czechoslovakia and Romania. In Poland, mineral fertilizer use will once again fall short of its 1980 peak, although supplies of plant protection agents should be somewhat higher than in 1982. Input supplies are tight throughout the region, and this is forcing officials to intensify campaigns for improved management and resource use. There should generally be a continued loosening of central control over the day-to-day affairs of farm management, and support for private producers will persist. Investment will be directed toward reducing harvesting, storage, and transportation losses rather than at simply raising the overall rate of growth of agricultural production. Completion of unfinished investment projects is also being stressed. (Robert Cummings)

YUGOSLAV AGRICULTURE: PERFORMANCE AND OUTLOOK

Yugoslavia entered 1982 with an inflation rate of 40 percent and facing a serious balance-of-payments deficit. The primary economic goals of 1982 were to reduce the deficit and to bring down the inflation rate to 15 percent, but only partial success was achieved. The inflation rate was reduced to around 30 percent, and a significant reduction in the balance-of-payments deficit was achieved, but at great cost to the domestic economy. Efforts to constrain imports led to shortages of raw materials, which were one of the causes for no increase in industrial production compared with 1981. National income grew by only 0.3 percent, and real income was down.

Food Shortages Persist Despite Good Harvest

The one sector of the Yugoslav economy that achieved notable success in 1982 was agriculture. Total agricultural production increased by 7 percent from 1981, in contrast to an increase of 1 percent from 1980. Impressive gains were achieved in the output of corn and wheat. The corn harvest was a record 11.1 million tons, in contrast to 1981's 9.8 million, and wheat production reached 5.2 million tons, up from 4.3 million.

Despite the improved performance of agriculture in 1982, Yugoslavia was still having problems meeting its food needs. There were shortfalls in wheat due to procurement problems and shortages of vegetable oil, meat, milk, and flour due to a combination of pricing distortions, import restrictions, and increased efforts to export agricultural commodities at the expense of domestic consumption.

The reason for the procurement problems lies in the fact that about two-thirds of agricultural output, including over 60 percent of the wheat and 80 percent of the corn, is produced by private farmers, who are not always willing to sell their products at official prices. The procurement target for wheat for the 1982/83 marketing year was set at 3.3 million tons, but at the end of 1982, only 2.8 million tons had been sold to state purchasing agencies, leaving a shortfall of 500,000 tons, most of which will probably have to be imported. This was a problem for corn as well. Of the 4.2-million-ton procurement target, only 2.7 million tons had been purchased as of November. However, authorities are optimistic that the remaining amount of corn could be purchased by the end of the marketing year.

Shortages of milk and flour are mainly due to domestic pricing policies: dairies reportedly lose 3 dinars per liter of milk sold (\$1 = 51.32 dinars in 1982). According to *Borba*, December 28, 1983, meat shortages result in part because slaughterhouses are faced with cattle prices that are higher than what they can sell the meat for. However, meat shortages are also due to high exports of meat and shortages of protein meal, much of which must be imported.

Soybean production was 200,000 tons, up from 92,000 in 1981. Rapeseed output was 80,000 tons, up from 65,000 in 1981. Total oilseed production, however, at 480,000 tons, was only slightly above 1981. The reason for such a slight overall increase in oilseeds was the sharply reduced sunflowerseed harvest: 200,000 tons, down from 327,000 in 1981. The decline in sunflowerseed production was due to a 29-percent reduction in planted

acreage and infestation with the fungal disease, phomopsis.

Production of edible oils was 169,000 tons in 1982, down slightly from 1981. Domestic oil needs were estimated at 307,000 tons, with the 140,000-ton shortfall to be covered by imports. Of the planned imports of vegetable oil, 120,000 tons were to be soybean oil. However, due to scarcities in foreign exchange, actual 1982 imports of soybean oil are estimated to have been only 70,000 tons, falling far short of projected needs. Imports of soybeans were also down: 180,000 tons, compared with 228,000 in 1981. The result has been serious shortages of vegetable oil, such that rationing has been implemented in several localities.

1982 Trade

The 1982 trade deficit was \$3.1 billion, down from \$4.9 billion in 1981 and \$6.7 billion in 1980. The 1982 deficit in the convertible currency area was \$3.3 billion, down from \$4.9 billion in 1981. Overall, 78 percent of imports were covered by exports, while in the convertible currency area, 63 percent were covered.

The spectacular reduction in the trade deficit was primarily due to a drastic decrease in imports, and not to any increase in exports. Imports fell approximately 19 percent in current prices in 1982, and exports were off 11 percent. Exports, especially those to the West, have suffered because of the relatively poor quality and high prices of Yugoslav manufactured goods. In addition, as a direct effect of import restrictions, there have been serious shortages of the imported inputs necessary for the production of goods for export.

One area where the Yugoslavs are making serious attempts to increase exports is agriculture. In the first 10 months of 1982, food exports reportedly totaled \$900 million, while farm imports were \$591 million. Since most exports of corn, meat, fruit, and wool take place in the last 2 months of the year, authorities seemed confident that total farm exports would reach \$1.3 billion by the end of the year. These exports were to include \$440 million worth of meat.

Agricultural Import Requirements For 1983

In January 1983, the Yugoslav authorities announced their desire to import wheat (500,000 tons), oilseeds (400,000 tons of soybeans), oilseed products (100,000 tons of soybean meal and 180,000 tons of vegetable oil), cotton (40,000 tons), and hides (8,000 tons) financed by foreign export credits. The quantities listed for wheat, soybeans, and vegetable oil represent the total expected shortfall for 1983. The 40,000 tons of cotton may offset expected declines in Soviet deliveries because of reduced export supplies in that country. Yugoslav authorities were hoping to finance most of these needs with import credits guaranteed by the CCC.

The CCC has granted credit guarantees totaling \$235 million—somewhat less than the original Yugoslav request. Guarantees were approved for oilseeds (\$44 million), vegetable oil (\$54 million), protein meal (\$22 million), wheat (\$47 million), hides (\$8 million), and cotton (\$60 million). With the exception of cotton, all these credit guarantees were authorized under the GSM-102 Export Credit Guarantee Program. The \$60 million

worth of credits approved for cotton purchases were blended credit: \$48 million of GSM-102 credit guarantees and \$12 million of GSM-5 direct, interest-free credit. All commodities purchased with these credits are to be shipped by September 30, 1983. If the credits are fully utilized, export volumes of these items will be significantly above U.S. shipments to Yugoslavia in 1982, and will satisfy most of the import needs previously listed.

The CCC credits do not cover approximately 200,000 tons of the projected wheat requirement, but Yugoslav officials expect to export 700,000 tons of corn this year, and the remaining 200,000 tons of wheat imports can be covered by the income from the corn exports. Also not covered by the CCC credits are about 200,000 tons of soybeans and about 50,000 tons of vegetable oil. If the Yugoslav estimate of soybean import requirements, 400,000 tons, is accurate, and if actual imports are no more than 200,000 tons, then the vegetable oil and meal shortages experienced in 1982 may continue.

Debts Continue To Accumulate

Despite Yugoslavia's improved balance-of-payments situation in 1983, the country is still under the burden of a \$19 billion convertible currency debt. Of this, approximately \$5.5 billion in principal and interest are due in 1983. Yugoslavia's debt-service ratio is now between 40 and 45 percent, up sharply from 1981, when the ratio was about 21 percent.

Debt payments due in 1982 came to \$4.2 billion. All of this has reportedly been repaid. However, at the beginning of 1983, the debt situation looked quite grave. The International Monetary Fund (IMF) estimated Yugoslavia's hard currency reserves at only \$500 to \$600 million. The international banking community was concerned that Yugoslavia might either default on its debt or ask for rescheduling.

Both Yugoslav authorities and Western officials fear that a debt rescheduling would lead to a loss of credibility for the Yugoslav leadership, leading to bank reluctance to continue lending. Since 50 percent of 1982 trade was with countries of the Soviet bloc, Western governments are afraid that such reluctance on the part of bankers could force the Yugoslavs to become more dependent on the Soviet Union. In fact, Yugoslav authorities have frequently warned that, in the absence of Western credit, they may have no choice but to turn even more to the Soviet Union.

A desire to preserve and strengthen Yugoslavia's commercial ties to the West prompted a group of Western governments, banks, and international lending institutions to put together an aid package of medium- and short-term credit for Yugoslavia, which, if approved in its entirety, will come to about \$6 billion. One of the key elements of this aid package is medium-term credit of \$1.3 billion approved by the governments of 15 countries, including the United States. In addition, commercial banks are considering credit of \$2 billion, of which \$600 million will be new loans and \$1.4 billion will be a rollover of medium-term credit. Also being considered by the banks is a rollover of \$1.8 billion of short-term credit. The World Bank is expected to approve a loan of \$250 to \$300 million, and the IMF is considering a net advance of \$400 million. The Bank of International Settlements in Basel, Switzerland, pending the transfer of the funds from the IMF, will provide a bridge loan of \$500 million to cover Yugoslav obligations until the \$1.3 billion in government credit come through.

Outlook for Farm Production and Trade

The 1983 plan calls for a 2.5-percent increase in total agricultural production. The production of all major crops except corn is to increase. Grain area will remain unchanged, and sugar beet and soybean area is to expand.

Yugoslavia: Area, yield, and production of major crops, 1982 performance and 1983 plan

Commodity	1982 performance			1983 plan		
	Prod. (Mil. tons)	Area (1,000 ha.)	Yield (Tons/ha.)	Prod. (Mil. tons)	Area (1,000 ha.)	Yield (Tons/ha.)
Corn	11.1	2,220	5.0	11.0	2,233	4.1
Wheat	5.2	1,558	3.4	6.0	1,560	3.9
Sugar beets	5.7	140	40.6	7.8	186.3	41.9
Soybeans	.18	73.3	2.4	.3	139.2	2.2

Source: *Privredni Pregled*, Jan. 27, 1983; *TANJUG*, Jan. 21, 1983.

Early Yugoslav reports indicate that most major crop goals will not be met. The planned production of corn still appears attainable, but yields should be less than planned because of a shortage of mineral fertilizer. The fertilizer situation is also critical for wheat, and it is unlikely that yields will increase sufficiently to guarantee the output target of 6 million tons. The sugar beet target will not be met. Sugar beets were sown on 40,000 hectares fewer than were planned, and some areas are already infested with pests. These areas are being plowed under because pesticide supplies are insufficient. Some Yugoslav reports evaluate preparations for the 1983 growing season as the worst in 25 years.

The 1983 plan places great emphasis on an increase in agricultural exports. The plan calls for agricultural exports of \$1.5 to \$1.6 billion, including meat exports of \$470 million. If the goal for meat exports is met, however, domestic shortages will likely persist because imports have been decreasing. Because of increasing domestic shortages, there will possibly be strong pressure from consumers to scale back export goals.

Financial Outlook for 1983

According to the plan, total 1983 exports are to increase 9 percent from 1982, while exports to the convertible currency area are to rise 20 percent. To overcome the raw-material bottlenecks that have hurt export production, the Yugoslavs plan a 4-percent increase in imports of raw materials. The 1983 plan calls for a 2-percent rise in industrial output as the minimum necessary to sustain these goals. However, 1982 saw no increase in industrial output, and in the first quarter of 1983, industrial production declined by 1 percent from a year earlier. Hence, the prospects for meeting the 1983 goals are not good. Current indications are that imports of raw materials will continue to be insufficient to realize the planned levels of industrial production and exports.

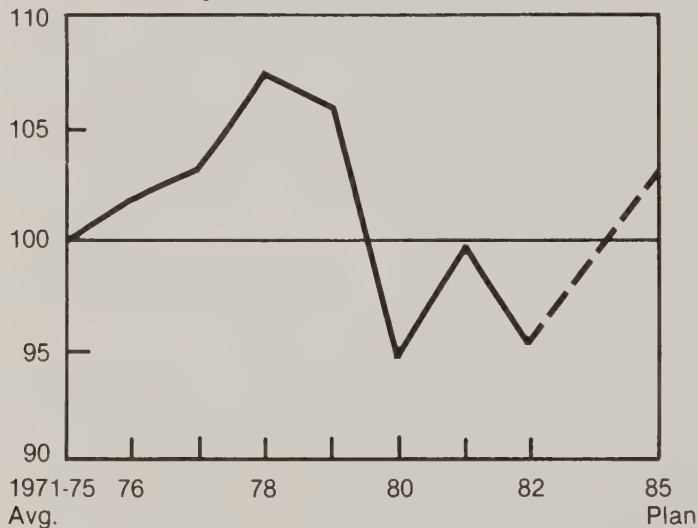
When the Western aid package is approved, Yugoslavia's serious debt problem will, in fact, only be postponed. Unless Yugoslavia can improve its balance of payments and build up hard currency reserves, it will continue to have problems meeting its debt obligations. However, Yugoslavia's debt-service ratio of about 40 to 45 percent, while serious, is not as high as that of Poland. If Yugoslavia can stabilize this ratio, there may be hope for a gradual economic recovery. (Nancy Cochrane)

POLISH AGRICULTURE: A YEAR AFTER MARTIAL LAW

In the first year following the imposition of martial law in Poland, little progress was made in reversing the downward slide in that country's agricultural sector. In fact, agricultural production in 1982 declined 4.5 percent to a level now roughly 13 percent below the 1978 record. The two most obvious reasons for the disappointing performance in 1982 were the serious drought that developed in spring and lasted throughout the growing season, and the inability to continue financing imports of livestock feed at past levels. Moreover, official price increases for inputs and consumer goods, which were not accompanied by commensurate increases in agricultural procurement prices, caused a serious decline in farmers' real income in 1982.

Index of Gross Agricultural Production, Poland, 1976-82 Annual and 1985 Plan

% of 1971-75 avg.



Government Plans for Agricultural Stabilization

The recently ratified 3-year Socio-Economic Plan for 1983-85 calls for a rebound in agricultural production, with growth targeted at 8 to 9 percent for the period as a whole. Such a growth rate is above the long-term trend in Poland, but even if it were achieved, it would leave agricultural production 4 percent below the precrisis peak.

There are a number of reasons to doubt that such growth can be achieved. First, the prospects for 1983 are already quite dim. The poor fodder crop of 1982 will have an unavoidable impact on livestock production in 1983. Serious drawdowns in hog inventories occurred through the fall and winter of 1982/83. Secondly, though agriculture and the food economy are now receiving a higher share of investments than in the past, the radical decline in total investment since 1980 will mean that real investment in agriculture during 1981-85 will be just 80 percent of the amount for 1976-80.¹ Likewise, supplies of consumer goods to the countryside have also declined. Taken together, this means that agriculture will probably have less of the means or the incentives to meet the planned targets over the next few years.

Prospects for Agricultural Reform

Though the lack of real resources will greatly hinder chances for success, agricultural reforms may still play an important role in effecting a recovery in Poland's farm sector. For the most part, these reforms were developed during 1980-81 and are aimed at improving economic efficiency and equalizing treatment of the private and socialized sectors. The status and prospects of some of the major reforms are discussed in the following paragraphs.

Permanence of private agriculture—This was one of the major demands advanced by private farmers following the rise of Solidarity and agreed to by the Government in February 1981. In March 1982, the Civil Code was revised to read that "the Polish People's Republic guarantees the ownership and full protection of private agriculture, which represents a permanent and equal component of the socio-economic structure of the Polish People's Republic."² However, such a revision in the legal code falls far short of private farmers' demand for an amendment to Poland's constitution guaranteeing their status. In the last year, agricultural specialists and the head of the Peasant Party have argued for such an amendment, but no definite action has yet been planned by the Government. Clearly, a constitutional amendment represents a much stronger guarantee for private agriculture and, for that reason, is probably encountering opposition within the Government and Communist Party hierarchies. But, the failure to enact such an amendment could convince private farmers that recent policy changes in their favor are merely changes of convenience, rescindable once agricultural and economic recovery is realized.

Rural self-management and farmer organizations—In October 1982, the Polish Government passed legislation outlawing Private Farmers' Solidarity and other independent farmers' organizations. In their place, farmers have been offered the "reformed" Agricultural Circle Cooperatives and the Branch Associations as the official social-trade organizations of farmers. These organizations were heavily compromised in the eyes of farmers in the 1970's, when they became completely integrated into the state bureaucracy and independent of members' control. Whether such distortions can be eliminated in the current economic and political atmosphere is certainly in doubt. It may be more likely that rural self-management will not be a real possibility until the Polish economy is in a stronger position to meet the aspirations of private farmers. Whether authentic rural self-management will ever be politically acceptable remains to be seen.

Access to land purchases—Polish agriculture possesses one of the most fragmented land structures in Europe. The size of the average farm, excluding mini-farms of under 2 hectares, is just 6.5 hectares. Furthermore, many farms are made up of a number of separate holdings. This has posed a major barrier to the introduction of modern technology. The policy of the Gierek era in dealing with this was to foster expansion of large-scale socialized agriculture. However, this approach proved very costly and led to the deteriorating economic performance of both private and socialized agriculture. Since 1980, the Government has halted plans to expand further

¹Trybuna Ludu, 10/21/82.

²Wies Wspolczesna, No. 5, 1982.

the socialized sector and has given private farmers much greater access through administrative and credit policy reforms to purchase land from state reserves. In both 1981 and 1982, the size of the private sector actually grew.

Reform of socialized agriculture—Policies aimed at forcing the expansion of socialized agriculture in the 1970's led to a serious deterioration in that sector's economic performance. By 1980, state farms were receiving the equivalent of over \$1 billion in direct operating subsidies and yet 25 percent could not make a profit. The reform of state farms initiated on July 1, 1981, was meant to greatly increase farm autonomy and efficiency by eliminating interference and operational subsidies from the Government. During the first year the reforms were in effect, the financial performance of state farms improved considerably.³ However, much of this was probably due to very favorable procurement prices for most of 1981/82. Since February 1982, there have been growing signs that the reform of state farms may be in trouble, because increases in the cost of production have outstripped procurement price increases.⁴ The Government remains politically committed to maintaining socialized agriculture more or less intact. For this reason, it may be difficult to instill the sense of discipline that this reform requires. The reform is further complicated by the fact that state farms are now held financially responsible for the poor investment decisions imposed on them under the directive system of management in the 1970's.

Income parity and profitability—Demands for income parity with nonagricultural workers and guaranteed profitability for farming voiced during 1980-81 came after years of second-class treatment of private agriculture in Poland. In 1981, for the first time in post-war Poland, the average income of farmers exceeded that of nonagricultural workers. Profitability of agriculture was high. However, profitability became an increasingly moot point as the State failed to supply rural markets with the consumer and producer goods commensurate with the demand fostered by the higher monetary incomes. Following the imposition of martial law, the State moved quickly to soak up excess agricultural incomes through higher prices. Not only did the real disposable income of farmers fall in 1982, it fell faster than the 19 percent for the economy as a whole. Agricultural incomes in 1982 were estimated at just 93 percent of the national average, with a further deterioration expected in 1983.⁵ Obviously, this is one area where farmer aspirations have not been met.

The Polish Government's decision to improve the operating environment for private farmers has come at an economically inopportune time. Though private farmers' access to land purchases have improved and they now receive a larger share of available fertilizer and machinery supplies than they did during the late 1970's, the overall economic situation is such that real income and living standards in the countryside have fallen drastically. The depressed economic situation is expected to continue hindering implementation of agricultural reform in the socialized sector and will probably postpone any possibility for greater rural self-government for a number of years. Therefore, recovery of agricultural production in Poland is likely to be protracted. (Edward Cook)

³Trybuna Ludu, 9/9/82.

⁴Rada Narodowa Gospodarka Administracja, No. 10, 6/14/82, and Rzeczpospolita, 6/11/82.

⁵Zycie Warszawy, 9/8/82, and Wies Wspolczesna, No. 10, 1982.

Table 1.—Production of grains, Eastern Europe, 1976-80 average and 1980-82 annual¹

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>1,000 tons</i>								
Wheat								
1976-80	3,513	4,949	2,998	5,181	5,089	6,104	5,306	33,140
1980	3,847	5,386	3,098	6,068	4,176	6,417	5,091	34,083
1981	4,443	4,325	2,942	4,602	4,203	5,295	4,270	30,080
1982	4,900	4,600	2,750	5,750	4,475	6,450	5,200	34,125
Rye								
1976-80	20	578	1,748	133	6,474	(50)	87	9,090
1980	28	570	1,917	139	6,566	(50)	79	9,349
1981	34	544	1,797	115	6,731	(50)	75	9,346
1982	45	545	2,100	120	7,800	50	85	10,745
Barley								
1976-80	1,532	3,386	3,715	769	3,560	1,981	664	15,607
1980	1,375	3,575	3,979	925	3,419	2,466	826	16,565
1981	1,406	3,392	3,476	899	3,540	2,571	720	16,004
1982	1,425	3,650	4,055	900	3,650	3,050	675	17,405
Oats								
1976-80	70	423	525	85	2,434	56	298	3,891
1980	54	423	582	106	2,245	47	294	3,751
1981	62	433	598	159	2,731	65	311	4,359
1982	50	490	845	100	2,610	75	270	4,440
Corn								
1976-80	2,652	724	2	6,347	165	11,097	9,192	30,179
1980	2,256	745	—	6,535	58	11,153	9,317	30,064
1981	2,401	706	3	6,813	65	11,892	9,807	31,687
1982	3,415	940	—	7,700	70	12,600	11,140	35,865
Rice								
1976-80	62	—	—	31	—	48	34	175
1980	67	—	—	24	—	39	42	172
1981	74	—	—	39	—	49	42	204
1982	70	—	—	50	—	60	40	220
Other grains ²								
1976-80	—	—	49	4	1,773	(47)	7	1,880
1980	—	—	46	3	1,872	(28)	5	1,954
1981	—	—	47	1	2,451	(23)	5	2,527
1982	—	—	250	—	2,580	40	5	2,875
Total grain								
1976-80	7,849	10,060	9,037	12,550	19,495	19,383	15,588	93,962
1980	7,627	10,699	9,622	13,800	18,336	20,200	15,654	95,938
1981	8,420	9,400	8,863	12,628	19,721	19,945	15,230	94,207
1982	9,905	10,225	10,000	14,620	21,185	22,325	17,415	105,675

— = No information reported, or amount under 2,000 tons. () = Estimate.

¹1982 data are preliminary. ²Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 2.—Area of grains, Eastern Europe, 1976-80 average and 1980-82 annual¹

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>1,000 hectares</i>								
Wheat								
1976-80	938	1,229	720	1,274	1,735	2,256	1,616	9,768
1980	968	1,197	707	1,276	1,609	2,239	1,516	9,512
1981	1,032	1,090	675	1,151	1,418	2,101	1,386	8,853
1982	1,060	1,070	590	1,310	1,455	2,190	1,560	9,235
Rye								
1976-80	15	186	645	81	2,997	(40)	64	4,028
1980	20	179	678	73	3,039	(40)	55	4,084
1981	27	171	656	74	3,002	(40)	54	4,024
1982	30	170	655	70	3,275	35	55	4,290
Barley								
1976-80	485	919	981	237	1,288	662	298	4,870
1980	426	921	969	246	1,322	810	324	5,018
1981	382	996	964	286	1,294	917	310	5,149
1982	350	970	950	290	1,240	900	285	4,985
Oats								
1976-80	49	162	157	35	1,067	52	215	1,737
1980	41	139	155	35	997	51	194	1,612
1981	46	160	172	55	1,156	62	194	1,845
1982	50	170	220	35	1,085	65	175	1,800
Corn								
1976-80	657	202	—	1,297	41	3,295	2,256	7,748
1980	584	192	—	1,229	16	3,288	2,202	7,511
1981	563	178	1	1,163	16	3,327	2,297	7,545
1982	620	185	—	1,125	15	3,000	2,220	7,165
Rice								
1976-80	17	—	—	23	—	21	8	69
1980	16	—	—	16	—	20	9	61
1981	16	—	—	13	—	20	9	58
1982	15	—	—	13	—	25	9	62
Other grains ²								
1976-80	—	—	20	2	740	28	6	796
1980	—	—	17	1	864	21	4	907
1981	—	—	17	1	1,021	16	4	1,059
1982	—	—	100	—	1,025	15	5	1,145
Total grain								
1976-80	2,160	2,699	2,524	2,949	7,868	6,353	4,462	29,015
1980	2,055	2,628	2,526	2,876	7,847	6,469	4,304	28,705
1981	2,066	2,595	2,485	2,743	7,907	6,483	4,254	28,533
1982	2,125	2,565	2,515	2,843	8,095	6,230	4,309	28,682

— = No information reported, or amount under 1,000 hectares. () = Estimate.

¹1982 data are preliminary. ²Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 3.—Grain trade, Eastern Europe, 1976-80 average and 1979-81 annual

Commodity and country	Imports				Exports			
	1976-80	1979	1980	1981	1976-80	1979	1980	1981
<i>1,000 tons</i>								
Total grains								
Bulgaria	576	908	692	1,016	429	396	651	377
Czechoslovakia	1,679	2,085	1,980	1,003	67	13	37	57
GDR	3,896	3,717	4,465	3,428	375	382	440	367
Hungary	291	326	153	179	1,036	645	931	1,457
Poland	6,880	7,338	7,811	7,218	34	67	6	—
Romania ¹	1,671	2,127	2,062	2,606	1,577	629	1,720	1,205
Yugoslavia	913	1,573	1,417	451	276	22	292	288
Total	15,906	18,074	18,580	15,901	3,795	2,154	4,077	3,751
Wheat								
Bulgaria	124	379	30	60	326	396	509	319
Czechoslovakia	519	736	537	218	—	—	—	—
GDR ²	953	811	476	794	59	55	50	72
Hungary	8	2	1	100	682	541	814	1,298
Poland	2,723	2,927	3,466	3,448	—	—	—	—
Romania ¹	652	800	630	1,000	971	251	704	200
Yugoslavia	630	417	1,347	408	18	2	5	50
Total	5,609	6,072	6,487	6,028	2,056	1,245	2,082	1,939
Barley								
Bulgaria	73	299	1	1	18	—	46	—
Czechoslovakia	126	11	169	20	59	13	34	18
GDR ²	782	1,161	564	582	147	179	150	154
Hungary	130	287	84	45	8	4	22	23
Poland	1,410	1,498	1,130	879	16	10	—	—
Romania ¹	84	165	60	—	—	—	—	—
Yugoslavia	22	53	35	5	4	—	10	17
Total	2,629	3,474	2,043	1,532	250	206	262	212
Corn								
Bulgaria	367	225	653	953	84	—	90	54
Czechoslovakia	942	1,206	1,181	675	—	—	—	15
GDR	1,775	1,201	3,161	1,823	—	—	—	—
Hungary	116	—	30	9	330	89	83	123
Poland	1,985	2,128	2,553	2,465	—	—	—	—
Romania ¹	582	920	1,280	1,520	602	378	994	1,000
Yugoslavia	240	1,094	1	—	249	20	273	220
Total	56,007	6,774	8,859	7,445	1,265	487	1,440	1,412
Other grains^{1, 3}								
Bulgaria	5	—	—	2	—	—	—	—
Czechoslovakia	14	46	20	9	4	—	3	24
GDR	342	500	220	187	170	148	240	141
Hungary	14	16	15	6	15	11	12	13
Poland	675	697	569	311	18	57	6	—
Romania	302	175	35	30	4	—	22	—
Yugoslavia	4	1	2	3	6	—	4	1
Total	1,356	1,435	861	548	217	216	287	179
Rice								
Bulgaria	7	5	8	—	1	—	6	4
Czechoslovakia	78	86	73	81	—	—	—	—
GDR	44	44	44	42	—	—	—	—
Hungary	23	21	23	19	—	—	—	—
Poland	87	88	93	115	—	—	—	—
Romania	56	67	57	56	—	—	—	5
Yugoslavia	17	8	32	35	—	—	—	—
Total	312	319	330	348	1	—	6	9

— = No information reported, or amount less than 2,000 tons.

¹FAO data. ²Trading partners data for exports only. ³Rye, oats, and grain sorghum.

Table 4.—Production of selected crops, Eastern Europe, 1976-80 average and 1980-82 annual¹

Commodity and year	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
<i>1,000 tons</i>								
Potatoes								
1976-80	370	3,678	9,873	1,194	42,742	4,431	2,705	64,993
1980	301	2,695	9,214	941	26,391	4,135	2,440	46,117
1981	403	3,743	10,378	1,112	42,562	4,447	2,774	65,419
1982	465	3,500	8,800	1,000	31,950	5,070	2,640	53,425
Sugar beets								
1976-80	1,827	7,132	6,996	3,975	14,149	6,135	5,258	45,472
1980	1,414	7,255	7,034	3,927	10,139	5,562	5,213	40,544
1981	1,136	6,969	8,043	4,719	15,867	5,441	6,224	48,399
1982	1,520	8,210	7,100	5,380	15,070	6,650	5,690	49,620
Sunflowerseed								
1976-80	392	17	—	298	—	821	433	1,961
1980	380	25	—	454	—	817	302	1,978
1981	457	33	—	624	—	810	327	2,251
1982	500	35	—	580	—	845	200	2,160
Rapeseed								
1976-80	—	151	291	80	637	12	60	1,231
1980	—	214	308	98	572	19	68	1,279
1981	—	200	284	75	496	14	65	1,134
1982	—	180	300	90	430	14	80	1,094
Soybeans								
1976-80	114	4	—	37	—	293	56	504
1980	107	6	—	37	—	448	34	632
1981	105	6	—	48	—	268	92	519
1982	115	6	—	60	—	350	200	731
Tobacco								
1976-80	141	5	5	20	80	46	67	364
1980	122	5	4	14	56	37	57	295
1981	133	6	4	20	96	28	63	350
1982	150	6	5	22	92	35	75	385
Corn silage								
1976-80	4,866	14,390	10,951	6,104	21,512	4,348	1,253	63,964
1980	4,498	14,647	11,434	6,613	18,000	3,688	1,460	60,340
1981	5,053	15,642	13,434	7,289	20,836	4,403	1,622	68,277
Hay ²								
1976-80	2,052	6,129	4,809	2,903	8,294	5,636	3,414	33,237
1980	2,080	7,169	6,113	3,128	8,089	5,312	3,378	35,269
1981	2,076	6,635	6,296	2,588	9,568	5,281	3,314	35,758
Feed roots								
1976-80	690	870	2,401	692	9,055	3,605	749	18,062
1980	479	715	1,714	661	8,044	2,986	685	15,284
1981	431	795	2,721	645	11,722	3,276	675	20,265

— = No information reported, or amount under 2,000 tons.

¹1982 data are preliminary and unavailable for corn silage, hay, and feed roots. ²Does not include meadow hay and includes only lucerne, clover, and vetch in Yugoslavia.

Table 5.—Area of selected crops, Eastern Europe, 1976-80 average and 1980-82 annual¹

Commodity and year	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
<i>1,000 hectares</i>								
Potatoes								
1976-80	35	223	566	84	2,410	291	301	3,910
1980	35	199	513	63	2,344	286	287	3,727
1981	37	200	505	61	2,257	299	291	3,650
1982	40	200	505	65	2,180	315	280	3,581
Sugar beets								
1976-80	66	217	260	118	505	247	125	1,538
1980	56	218	250	104	460	238	128	1,454
1981	56	219	262	122	470	282	147	1,558
1982	58	215	255	125	495	260	140	1,548
Sunflowerseed								
1976-80	233	13	—	185	—	515	214	1,160
1980	247	20	—	273	—	508	180	1,228
1981	260	19	—	302	—	506	196	1,283
1982	250	22	—	290	—	495	140	1,197
Rapeseed								
1976-80	—	72	124	53	327	8	28	612
1980	—	91	125	51	320	14	32	633
1981	—	95	124	56	277	13	31	596
1982	—	80	125	60	260	10	45	580
Soybeans								
1976-80	83	3	—	25	—	239	29	279
1980	94	1	—	20	—	364	17	496
1981	94	2	—	22	—	310	48	476
1982	70	3	—	26	—	315	75	489
Tobacco								
1976-80	116	4	3	16	51	48	62	300
1980	108	4	3	14	52	44	57	282
1981	106	4	3	15	49	39	56	272
1982	105	3	3	15	50	50	65	291
Corn silage								
1976-80	273	439	372	319	624	172	42	2,241
1980	360	436	365	329	668	44	49	2,251
1981	341	423	366	346	577	53	57	2,163
Hay ²								
1976-80	453	957	540	656	1,698	942	659	5,905
1980	469	998	604	635	1,692	704	660	5,762
1981	462	1,010	624	599	1,900	782	646	6,023
Feed roots								
1976-80	14	21	55	20	258	85	35	488
1980	12	20	40	19	257	76	34	458
1981	11	17	60	19	273	90	34	504

— = No information reported, or amount less than 2,000 hectares.

¹1982 data are preliminary and unavailable for corn silage, hay, and feed roots. ²Does not include meadow hay, and includes only lucerne, clover, and vetch in Yugoslavia.

**Table 6.—Trade of selected agricultural commodities, Eastern Europe,
1976-80 average and 1979-81 annual**

Commodity and country	Imports				Exports			
	1976-80	1979	1980	1981	1976-80	1979	1980	1981
	1,000 tons				1,000 tons			
Oilseeds¹								
Bulgaria	9	36	6	27	22	40	15	13
Czechoslovakia	135	170	91	58	2	—	2	2
GDR	55	51	84	50	21	22	11	25
Hungary	8	22	15	11	86	133	107	92
Poland	143	211	279	108	51	—	—	—
Romania	(251)	(329)	(279)	(153)	4	2	2	2
Yugoslavia	163	253	233	275	16	68	8	1
Total	(764)	(1,072)	(987)	(682)	202	265	145	135
Vegetable oil, edible								
Bulgaria	1	—	2	1	16	15	13	18
Czechoslovakia	44	51	21	53	1	—	—	—
GDR	113	106	112	109	—	—	—	—
Hungary	14	12	9	11	58	49	95	117
Poland	78	64	104	61	57	39	7	6
Romania	9	4	20	16	122	146	86	82
Yugoslavia	52	11	81	116	14	40	17	5
Total	311	248	349	367	268	289	218	228
Meat and meat products²								
Bulgaria	9	3	5	2	108	102	117	98
Czechoslovakia	26	22	31	21	32	60	54	72
GDR	24	20	31	23	133	134	122	131
Hungary	13	11	16	20	285	310	347	354
Poland	48	2	52	188	156	167	162	82
Romania	39	55	90	67	187	225	191	206
Yugoslavia	38	48	64	33	74	80	60	76
Total	197	161	289	354	975	1,078	1,053	1,019
Sugar³								
Bulgaria	219	224	194	283	2	—	—	—
Czechoslovakia	88	94	92	101	210	249	260	215
GDR	209	223	188	277	82	77	94	108
Hungary	84	80	40	136	31	35	106	76
Poland	58	62	124	185	208	105	26	14
Romania	139	147	199	217	72	7	87	266
Yugoslavia	85	—	—	179	78	71	317	1
Total	882	830	837	1,378	683	544	890	680
Tobacco								
Bulgaria	7	8	12	14	69	72	73	67
Czechoslovakia	21	20	26	28	1	—	—	—
GDR	20	20	26	18	2	2	3	3
Hungary	7	4	7	8	1	1	3	5
Poland	12	13	23	24	9	9	9	3
Romania	1	—	—	—	7	10	3	4
Yugoslavia	4	4	7	7	24	26	25	22
Total	72	60	101	99	113	120	116	104
Oilseed meal								
Bulgaria	194	136	184	230	—	—	—	—
Czechoslovakia	643	593	753	722	—	—	—	—
GDR	949	986	943	1,030	—	—	—	—
Hungary	614	622	620	599	—	—	—	—
Poland	1,160	1,274	1,361	1,348	—	—	—	—
Romania	297	270	385	654	—	—	—	—
Yugoslavia	172	90	148	177	—	—	—	—
Total	4,029	3,971	4,394	4,760	—	—	—	—
Cotton								
Bulgaria	57	56	64	56	—	—	—	—
Czechoslovakia	109	122	114	109	—	—	—	—
GDR	90	84	99	86	—	—	—	—
Hungary	93	95	117	95	—	—	—	—
Poland	163	163	173	152	—	—	—	—
Romania	111	109	120	119	—	—	—	—
Yugoslavia	108	98	110	100	—	—	—	—
Total	731	727	797	717	—	—	—	—
Hides and skins								
Bulgaria	6	7	5	7	—	—	—	—
Czechoslovakia ⁴	(52)	(53)	(51)	(17)	—	—	—	—
GDR	17	19	19	16	—	—	—	—
Hungary	31	29	31	27	—	—	—	—
Poland	42	42	43	31	—	—	—	—
Romania	44	54	43	50	—	—	—	—
Yugoslavia	27	21	30	29	—	—	—	—
Total	(219)	(225)	(222)	(177)	—	—	—	—

— = Estimate. — = No information reported, or less than 2,000 tons.

¹Rapeseed, soybeans, and sunflowerseed. ²Includes poultry meat. ³Raw basis. ⁴Converted from pieces to metric tons at 22 kilograms per piece.

Sources: Statistical yearbooks of respective countries, CEMA Yearbook, FAO Trade Yearbook, statistical yearbooks of trading partners.

Table 7.—January livestock numbers, Eastern Europe, 1976-80 average and 1981-83 annual¹

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>1,000 head</i>								
Cattle								
1976-80	1,733	4,754	5,544	1,926	12,339	6,361	5,575	38,232
1981	1,796	5,002	5,723	1,918	11,337	6,485	5,474	37,735
1982	1,807	5,103	5,749	1,945	11,467	6,303	5,464	37,838
1983	1,783	5,130	5,690	1,920	11,020	6,400	5,400	37,343
Cows								
1976-80	697	1,902	2,145	773	5,914	2,612	3,181	17,224
1981	702	1,902	2,138	765	5,666	2,670	3,086	16,929
1982	706	1,905	2,122	759	5,706	2,592	3,079	16,869
1983	703	1,900	2,125	751	5,685	2,680	3,050	16,894
Hogs								
1976-80	3,669	7,240	11,683	7,805	20,219	9,997	7,513	68,126
1981	3,808	7,894	12,871	8,330	18,734	11,542	7,867	71,046
1982	3,844	7,302	12,869	8,300	19,081	12,464	8,431	72,321
1983	3,809	7,125	12,107	9,035	17,565	12,000	8,350	69,991
Sheep								
1976-80	10,105	837	1,925	2,560	3,452	14,818	7,504	41,201
1981	10,433	910	2,038	3,090	3,490	15,865	7,384	43,210
1982	10,726	959	2,169	3,140	3,510	17,288	7,398	45,190
1983	10,761	1,000	2,193	3,183	3,430	17,300	7,360	45,227
Horses								
1976-80	126	54	67	141	1,970	565	751	3,674
1981	120	45	70	120	1,780	555	573	3,263
1982	119	44	76	112	1,726	598	515	3,190
1983	118	43	77	111	(1,700)	610	500	(3,159)
Poultry								
1976-80	39,989	44,871	49,102	63,002	86,259	90,858	59,752	433,833
1981	41,636	47,283	51,611	65,042	81,164	97,800	65,690	450,226
1982	40,563	47,388	54,392	67,496	71,281	109,244	67,408	457,772
1983	42,861	44,500	51,356	68,000	57,000	110,000	66,398	440,115

() = Estimate.

¹1983 data are preliminary.

Table 8.—Production of principal livestock products, Eastern Europe, 1976-80 average and 1980-82 annual¹

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>1,000 tons</i>								
Beef and veal ²								
1976-80	143	424	447	203	869	306	362	2,754
1980	154	436	431	203	846	304	360	2,734
1981	150	423	452	198	624	289	356	2,492
1982	155	430	440	200	790	225	363	2,603
Mutton, lamb, and goat meat ²								
1976-80	99	6	20	15	29	76	60	305
1980	104	6	21	17	20	78	59	315
1981	113	7	19	16	27	64	58	304
1982	116	7	18	17	24	68	60	310
Pork ²								
1976-80	349	803	1,198	922	1,728	876	798	6,674
1980	372	851	1,258	986	1,768	977	815	7,054
1981	380	889	1,358	994	1,384	1,008	844	6,857
1982	400	785	1,215	1,020	1,500	895	850	6,665
Poultry meat ²								
1976-80	149	159	137	328	374	363	250	1,760
1980	145	172	145	355	441	406	299	1,941
1981	147	170	149	365	455	422	286	1,994
1982	150	165	140	420	195	410	295	1,775
Total meat ^{2, 3}								
1976-80	745	1,423	1,821	1,472	3,064	1,623	1,476	11,624
1980	781	1,499	1,899	1,566	3,141	1,769	1,519	12,174
1981	794	1,527	1,997	1,577	2,526	1,786	1,555	11,762
1982	825	1,425	1,832	1,661	2,545	1,602	1,579	11,469
Milk ⁴								
1976-80	1,653	5,629	8,155	2,283	16,805	4,164	4,136	42,825
1980	1,830	5,909	8,321	2,548	16,494	4,148	4,342	43,592
1981	1,890	5,918	8,202	2,717	15,341	3,601	4,484	42,153
1982	1,940	5,900	7,700	2,760	15,340	3,100	4,590	41,330
Eggs								
1976-80	2,163	4,690	5,287	4,475	8,523	6,583	4,117	35,838
1980	2,434	4,900	5,514	4,385	8,902	6,727	4,394	37,256
1981	2,450	4,968	5,670	4,332	8,846	7,017	4,427	37,742
1982	2,506	5,030	5,700	4,350	7,600	7,480	4,500	37,166

¹1982 data are preliminary. ²Data include offal and edible slaughter fat, and live animal exports for slaughter. CEMA data except for Yugoslavia. ³Data include horse and rabbit meat, CEMA data except for Yugoslavia. ⁴Data include only cow milk for consumption in Romania, Yugoslavia, and Hungary. Data in the remaining countries include milk sucked by calves. In the GDR, milk production is given in 3.5 percent fat equivalent. One liter is equivalent to 1.031 kilograms.

Table 9.—Per capita consumption of selected foods, Eastern Europe, 1975 and 1980-82¹

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania ²	Yugo-slavia
<i>Kilograms</i>							
Total meat							
1975	58.0	81.1	77.8	68.5	70.3	45.7	48.3
1980	61.2	85.6	89.5	71.7	74.0	60.0	54.2
1981	63.0	86.6	90.5	72.0	65.0	—	55.8
1982	(64.0)	80.3	(90.6)	73.0	(58.0)	³ (68.0)	—
Eggs ⁴							
1975	146	297	269	274	209	214	166
1980	204	316	289	342	222	270	190
1981	209	321	290	348	227	—	—
1982	214	—	—	356	200	—	—
Vegetable oil							
1975	14.1	6.7	2.0	2.9	6.5	—	10.6
1980	14.8	7.2	1.6	4.2	6.8	—	11.3
1981	15.0	7.3	1.6	(4.4)	7.4	—	—
Sugar							
1975	32.5	38.0	36.8	39.4	43.2	20.3	32.8
1980	34.7	37.5	40.6	37.9	41.4	28.2	36.6
1981	35.5	36.9	40.8	36.0	33.4	—	—
Grain, in flour equivalent							
1975	162	108	95	118	120	189	183
1980	160	107	94	112	127	172	178
1981	159	110	95	(111)	130	180	—
Vegetables							
1975	127	74	90	85	109	113	87
1980	125	66	94	80	101	140	97
1981	131	67	95	—	122	—	—
Potatoes							
1975	23	96	142	67	173	96	66
1980	27	76	143	61	158	71	61
1981	31	80	141	62	158	—	—

— = No information reported. () = Estimate.

¹1982 data are preliminary and listed if available. ²*Revista Economica*, Dec. 29, 1978; *Lumea*, Oct. 30, 1981; Bucharest Domestic Service, Nov. 1, 1981; *Scinteia*, Nov. 29, 1981. ³Includes fish. ⁴Numbers.

Table 10.—Total and agricultural trade, Eastern Europe, 1976-82¹

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe
<i>Million dollars</i>								
Exports ²								
1976	5,382	9,035	11,361	4,934	11,017	6,138	3,557	52,424
1977	6,351	10,302	12,024	5,832	12,265	6,979	5,256	59,009
1978	7,478	11,747	13,267	6,345	14,114	8,077	5,668	66,696
1979	8,869	13,198	15,063	7,938	16,249	9,724	6,605	77,646
1980	10,372	14,891	17,312	8,677	16,997	12,056	9,842	90,147
1981	10,748	14,876	19,980	8,712	13,182	12,610	10,929	91,037
1982	11,725	16,230	NA	8,860	11,280	10,120	9,700	NA
Imports ²								
1976	5,626	9,706	13,196	5,528	13,867	6,095	6,882	60,900
1977	6,393	11,187	14,334	6,523	14,616	7,018	9,633	69,704
1978	7,651	12,565	14,572	7,902	16,089	8,910	9,983	77,672
1979	8,514	14,262	16,214	8,674	17,584	10,916	13,240	89,404
1980	9,650	15,148	19,082	9,235	19,089	13,201	16,516	101,921
1981	10,854	14,648	20,303	9,128	15,224	12,458	15,817	98,432
1982	11,820	16,160	NA	8,870	10,268	8,330	12,800	NA
Balance								
1976	-244	-671	-1,835	-594	-2,850	43	-2,325	-8,476
1977	-42	-885	-2,310	-691	-2,351	-39	-4,377	-10,695
1978	-173	-818	-1,305	-1,557	-1,975	-833	-4,315	-10,976
1979	355	-1,064	-1,151	-736	-1,335	-1,192	-6,635	-11,758
1980	722	-257	-1,770	-558	-2,092	-1,145	-6,674	-11,774
1981	-106	228	-323	-416	-2,042	152	-4,888	-7,395
1982	-95	70	NA	-10	1,020	1,790	-3,100	NA
Agricultural exports ³								
1976	955	339	331	1,453	978	929	617	5,602
1977	1,036	374	323	1,749	1,024	1,275	595	6,376
1978	1,057	438	413	1,785	1,080	1,274	713	6,760
1979	1,253	545	466	2,102	1,201	1,175	815	7,557
1980	1,424	693	530	1,990	1,104	1,387	1,210	8,338
1981	1,142	621	535	2,248	747	1,401	879	7,573
Agricultural imports ³								
1976	504	1,462	1,840	937	1,895	881	902	8,421
1977	447	1,633	1,871	1,155	2,040	811	1,132	9,089
1978	498	1,684	2,023	1,170	2,294	857	1,067	9,593
1979	594	2,206	2,223	1,211	2,551	1,146	1,519	11,450
1980	610	2,102	2,457	1,101	3,188	1,424	1,845	12,727
1981	722	1,907	2,153	1,037	3,199	1,461	1,153	11,632
Agricultural trade balance								
1976	451	-1,123	-1,509	516	-917	48	-285	-2,819
1977	589	-1,259	-1,548	594	-1,016	464	-537	-2,713
1978	559	-1,246	-1,610	615	-1,214	417	-354	-2,833
1979	659	-1,661	-1,757	891	-1,350	29	-704	-3,893
1980	814	-1,409	-1,927	889	-2,084	-37	-635	-4,389
1981	420	-1,286	-1,618	1,211	-2,452	-60	-274	-4,059

NA = Not available.

¹1982 data are preliminary and unavailable for agricultural trade. ²United Nations data. ³FAO data.

Table 11.—U.S. total and agricultural trade with Eastern Europe, 1979-82

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>Million dollars</i>								
Total exports								
1979	56.2	295.5	388.0	80.6	804.3	510.5	773.1	2,908.2
1980	172.2	236.1	558.8	88.2	761.4	748.5	768.3	3,333.5
1981	264.4	97.2	344.4	77.5	684.1	548.8	657.0	2,673.4
1982	106.6	111.7	236.6	67.8	294.1	223.3	554.6	1,594.7
Total imports								
1979	34.7	50.9	36.4	112.2	425.6	329.3	388.9	1,378.0
1980	24.9	65.9	43.4	107.5	418.4	312.2	446.3	1,418.6
1981	25.6	67.2	44.7	127.9	359.9	559.4	445.5	1,630.2
1982	25.1	61.5	51.8	133.2	212.9	339.1	355.9	1,179.5
Balance								
1979	21.5	244.6	351.6	-31.6	378.7	181.2	384.2	1,530.2
1980	147.3	170.2	515.4	-19.3	343.0	436.3	322.0	1,914.9
1981	238.8	30.0	299.7	-50.4	324.2	-10.6	211.5	1,043.2
1982	81.5	50.2	184.8	-65.4	81.2	-115.8	198.7	415.2
Total agricul-tural exports								
1979	41.0	272.3	370.6	27.5	669.4	346.6	324.3	2,051.7
1980	138.9	205.5	534.3	33.6	622.4	490.9	293.2	2,318.8
1981	203.6	73.0	333.0	12.9	596.4	413.3	148.8	1,781.0
1982	64.1	90.2	217.8	7.1	181.8	133.6	182.0	876.6
Direct agricul-tural exports								
1979	41.0	257.9	337.1	24.5	651.4	336.5	284.4	1,932.8
1980	127.3	154.6	453.3	24.4	571.5	462.6	277.5	2,071.2
1981	197.3	58.2	284.2	12.9	592.9	368.4	137.9	1,651.8
1982	64.0	62.1	203.9	7.1	180.3	133.6	182.0	833.0
Transshipments								
1979	0	14.4	33.5	3.0	18.0	10.1	39.9	118.9
1980	11.6	50.9	81.0	9.2	50.9	28.3	15.7	247.6
1981	6.3	14.8	48.8	0	3.5	44.9	10.9	129.2
1982	.1	28.1	13.9	0	1.5	0	0	43.6
Total agricul-ural imports								
1979	23.2	7.7	2.2	35.8	164.0	33.6	86.4	352.9
1980	17.4	10.4	2.8	30.6	155.7	30.5	63.6	311.0
1981	21.5	12.1	1.0	33.7	109.1	28.0	71.7	277.1
1982	21.7	13.5	2.4	33.1	69.3	18.7	69.0	227.7
Balance								
1979	17.8	264.6	368.4	-8.3	505.4	313.0	237.9	1,698.8
1980	121.5	195.1	531.5	3.0	466.7	460.4	229.6	2,007.8
1981	182.1	60.9	332.0	-20.8	487.3	385.3	77.1	1,503.9
1982	42.4	76.6	215.4	-26.0	112.5	114.9	113.0	648.9

Sources: Bureau of the Census, Dept. of Commerce; U.S. Export Sales, FAS/USDA.

**Table 12.—Volume and value of U.S. agricultural exports to Eastern Europe¹,
1976-80 average and 1980-82 annual**

Commodity and country	Volume				Value			
	1976-80	1980	1981	1982	1976-80	1980	1981	1982
	<i>1,000 tons</i>				<i>Million dollars</i>			
Total grain								
Bulgaria	230	635	934	279	27.8	80.1	134.0	32.0
Czechoslovakia	723	974	412	435	97.2	142.9	52.2	57.3
GDR	2,074	3,120	1,796	1,504	265.9	455.7	271.7	176.2
Hungary	44	1	1	—	5.2	0.8	0.8	—
Poland	2,769	2,916	2,340	437	330.5	406.4	359.9	45.3
Romania	864	1,918	1,631	236	107.1	273.7	247.5	29.3
Yugoslavia	522	844	137	609	73.0	140.6	19.9	78.9
Total	7,226	10,408	7,251	3,500	906.7	1,500.2	1,086.0	419.0
Wheat								
Bulgaria	—	—	—	—	—	—	—	—
Czechoslovakia	165	239	—	—	28.9	44.6	—	—
GDR	294	252	174	108	45.7	49.5	34.2	16.6
Hungary	—	—	—	—	—	—	—	—
Poland	617	349	92	—	83.1	66.2	17.0	—
Romania	244	540	63	—	33.9	92.3	8.3	—
Yugoslavia	250	844	137	226	41.9	140.5	19.9	33.5
Total	1,570	2,224	466	334	233.5	393.1	79.4	50.1
Corn								
Bulgaria	240	635	934	279	27.8	80.1	134.0	32.0
Czechoslovakia	549	735	412	435	67.0	98.2	52.2	57.3
GDR	1,650	2,767	1,511	1,396	207.0	392.6	224.7	159.6
Hungary	21	—	—	—	2.4	—	—	—
Poland	1,840	2,549	2,233	437	212.1	328.0	335.4	45.3
Romania	544	1,318	1,568	236	66.1	173.1	238.4	29.3
Yugoslavia	254	—	—	383	29.4	—	—	45.4
Total	5,098	8,004	6,658	3,166	611.8	1,072.0	984.7	368.9
Soybeans								
Bulgaria	—	—	22	—	—	—	6.2	—
Czechoslovakia	6	1	—	13	4.4	0.4	—	3.1
GDR	5	2	1	—	1.2	0.4	0.2	—
Hungary	—	—	—	—	—	—	—	—
Poland	134	263	87	100	35.6	72.3	25.3	22.4
Romania	222	248	153	244	54.9	61.8	35.7	60.7
Yugoslavia	155	218	244	189	42.2	60.4	70.1	44.9
Total	522	732	507	546	138.3	195.3	137.5	131.1
Vegetable oil								
Bulgaria	—	—	—	—	—	—	—	—
Czechoslovakia	—	—	—	—	—	—	—	—
GDR	1	—	—	—	1.0	—	—	—
Hungary	—	—	—	—	—	—	—	—
Poland	15	12	12	12	8.8	7.2	7.3	8.8
Romania	—	—	—	—	—	—	—	—
Yugoslavia	4	20	7	16	2.4	12.2	3.8	8.4
Total	20	32	19	28	12.2	19.4	11.1	17.2
Soybean meal and cake								
Bulgaria	73	196	214	107	16.9	47.9	52.1	23.4
Czechoslovakia	281	218	36	85	56.7	46.3	8.3	18.8
GDR	345	362	208	172	75.7	75.7	58.4	39.0
Hungary	95	95	—	—	22.8	27.2	—	—
Poland	356	324	288	7	76.1	75.1	77.0	1.4
Romania	158	334	372	57	36.0	79.1	101.4	14.3
Yugoslavia	133	182	140	96	27.8	45.4	34.1	21.6
Total	1,441	1,711	1,258	524	312.0	396.7	331.3	118.5
Cotton								
Bulgaria	—	—	—	—	—	—	—	—
Czechoslovakia	—	—	—	—	—	—	—	—
GDR	—	—	—	2	—	—	—	—
Hungary	—	—	2	—	—	—	3.9	—
Poland	8	5	6	—	12.3	10.7	15.0	—
Romania	10	21	—	—	15.4	33.0	—	—
Yugoslavia	—	1	—	—	—	0.5	—	—
Total	18	27	8	4	27.7	44.2	18.9	—
Cattle hides²								
Bulgaria	41	29	—	—	1.1	1.2	—	—
Czechoslovakia	589	315	334	415	15.2	8.4	8.5	10.1
GDR	33	43	—	—	0.7	0.8	—	—
Hungary	183	94	112	102	3.9	2.2	3.0	2.3
Poland	441	522	203	791	12.6	19.5	5.5	21.9
Romania	1,486	1,046	680	939	38.8	28.9	22.0	27.2
Yugoslavia	461	413	230	298	9.9	14.9	7.7	9.9
Total	3,234	2,462	1,559	2,545	82.2	75.9	46.7	71.4
Other								
Bulgaria	—	—	—	—	4.9	9.6	11.3	8.7
Czechoslovakia	—	—	—	—	10.3	7.5	4.0	0.9
GDR	—	—	—	—	3.5	1.7	2.7	2.6
Hungary	—	—	—	—	4.6	3.4	5.2	4.8
Poland	—	—	—	—	42.6	31.2	106.4	82.0
Romania	—	—	—	—	5.8	14.4	6.7	2.1
Yugoslavia	—	—	—	—	26.6	19.2	13.2	18.3
Total	—	—	—	—	98.3	87.0	149.5	119.0
Total agricultural exports								
Bulgaria	—	—	—	—	50.7	138.9	203.6	64.1
Czechoslovakia	—	—	—	—	183.8	205.5	73.0	90.2
GDR	—	—	—	—	348.0	534.3	333.0	217.8
Hungary	—	—	—	—	36.5	33.6	12.9	7.1
Poland	—	—	—	—	518.5	622.4	596.4	181.8
Romania	—	—	—	—	258.0	490.9	413.3	133.6
Yugoslavia	—	—	—	—	181.9	293.2	148.8	182.0
Total	—	—	—	—	1,577.4	2,318.8	1,781.0	876.6

— = Insignificant volume, amount less than \$1 million, or not applicable.

¹Including estimated transshipments through Belgium, Canada, the Federal Republic of Germany, and the Netherlands. ²1,000 pieces.

Sources: Bureau of the Census, Dept. of Commerce; Foreign Agricultural Trade of the United States, ERS/USDA; U.S. Export Sales, FAS/USDA.

**Table 13.—Volume and value of U.S. agricultural imports from Eastern Europe,
1976-80 average and 1980-82 annual**

Commodity and year	1976-80	1980	1981	1982
<i>1,000 tons</i>				
Processed meat				
Bulgaria	—	—	—	—
Czechoslovakia	1.1	1.6	1.6	1.6
GDR	—	—	—	—
Hungary	7.6	7.8	7.4	6.8
Poland	39.4	42.5	26.1	15.9
Romania	6.9	6.9	6.4	3.3
Yugoslavia	14.6	8.8	9.9	11.8
Total	69.6	67.6	51.4	39.4
<i>Million dollars</i>				
Processed meat				
Bulgaria	0.04	0.12	0.10	—
Czechoslovakia	3.36	4.50	4.72	5.17
GDR	0.10	0.06	0.03	—
Hungary	23.71	25.65	25.35	23.96
Poland	131.33	138.91	90.04	58.23
Romania	18.92	19.51	17.00	8.34
Yugoslavia	47.18	28.71	33.84	41.80
Total	224.64	217.46	171.08	137.50
Other products				
Bulgaria	19.87	17.32	21.39	21.70
Czechoslovakia	3.38	5.94	7.37	8.37
GDR	2.00	2.77	0.85	2.47
Hungary	5.23	4.93	8.33	9.16
Poland	17.45	16.83	19.08	11.10
Romania	7.54	10.96	10.95	10.32
Yugoslavia	38.06	34.92	37.84	27.18
Total	93.53	93.67	105.81	90.30
Total				
Bulgaria	19.91	17.44	21.49	21.70
Czechoslovakia	6.74	10.44	12.09	13.54
GDR	2.10	2.83	0.88	2.47
Hungary	28.94	30.58	33.68	33.12
Poland	148.78	155.74	109.12	69.33
Romania	26.46	30.47	27.95	18.66
Yugoslavia	85.24	63.63	71.68	68.98
Total	318.17	311.13	276.89	227.80

— = Amount less than 1,000 tons or \$1,000.

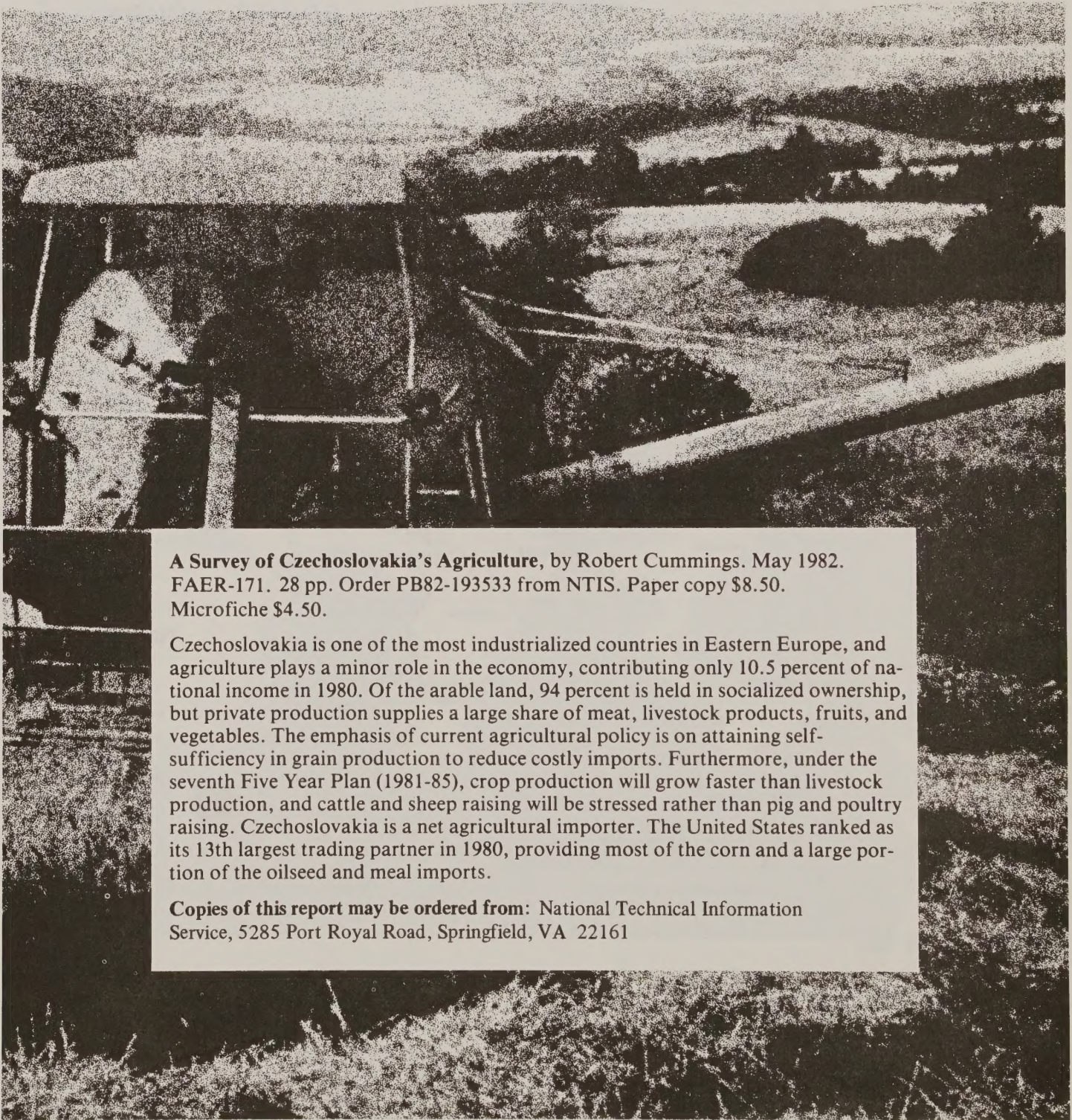
Source: Bureau of the Census, U.S. Dept. of Commerce.

Eastern Europe



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A Survey of Czechoslovakia's Agriculture



A Survey of Czechoslovakia's Agriculture, by Robert Cummings. May 1982. FAER-171. 28 pp. Order PB82-193533 from NTIS. Paper copy \$8.50. Microfiche \$4.50.

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